



Using micro-learning to train educators - a cascade approach to media and information literacy

D3.5: Transferability Toolkit

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Abstract

This document provides an overview and guidelines for organisations wishing to sponsor the MIC-MAC Training Course. This toolkit introduces the programme, describes the training components, and provides information on how the course can be implemented in a variety of settings. The Toolkit is of interest to anyone working to help promote the media and information literacy of young people and adults.

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Statement of Originality

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Document Summary

This document is aimed to help you implement your own version of a media and information literacy training programme for educators. The programme was developed under the project title, *Using micro-learning to train educators - a cascade approach to developing media and information literacy competences*. We refer to the programme as MIC-MAC and the document you are reading is the *MIC-MAC Transferability Toolkit*. The original version of the programme was sponsored by the European Media and Information Fund.

The *MIC-MAC Transferability Toolkit* aims to help future sponsors and course designed understand the underlying principles of the MIC-MAC Programme and enhance access use of its tools and content. It's essentially a 'User Manual' – or 'Handbook' - for the MIC-MAC programme that provides Guidelines, procedures, tools and practice examples to support the successful transferability and implementation of the programme within organisations who work with young people and adults who would benefit from improved media and information literacy (hereafter, MI&L).

The Toolkit approach is based on 'Ten Steps to Transferability' each of which takes the reader through the process of developing and customizing their local MIC-MAC programme to suit local needs, from familiarisation with the programme and tools, through adaptation and customisation to evaluation and sustainability.

Each step is based on a 'primary task' and provides:

- guiding principles to perform the task
- a checklist of activities to be carried out
- pitfalls and trouble-shooting tips, including good practice examples of how to carry out the task and activities successfully
- list of resources to support the task and activities.

How this document is organised

In Section One, we introduce **MIC-MAC**, including more detailed information on how the pilot course was designed, and what we learned from this. This section will be of interest to course designers, continuing education professionals, and people with an interest in promoting policy to support MI&L of young people and adults.

Section Two, ***Transferring MIC-MAC to Your Organisation***, gives a roadmap on how your own organisation can set up a version of the Course. Section Two can serve as a standalone guide for course sponsors who are ready to get down to nuts and bolts! This section is divided into ten different subsections, based on our ten-step transferability framework. These subsections include:

1. Programme familiarisation
2. Understanding educator's needs
3. Identifying key stakeholders

4. Designing the training programme
5. Implementation planning
6. Training programme delivery
7. Mentoring and Support
8. Assessment and Certification
9. Evaluating the Programme
10. Scaling the Programme Up and Out

The transferability toolkit concludes in (a very short) Section Three where we provide some information on Resources **for Your MIC-MAC course**.

Section One: Introduction to MIC-MAC

The MIC-MAC Learning and Development Programme is an online learning programme aimed at educators, vocational trainers, community workers, volunteers and other professionals (see definition below) working in learning and community-based organisations (hereafter, *learning organisations*) interested in promoting better media and information literacy (MI&L) for young people and adults (hereafter referred to as learners).

The course takes as its starting point that educators form a valuable first line of defence in helping learners identify and decipher information sources, to ascertain which are trustworthy.

Promotion of MI&L is of interest to anyone who values critical thinking and living in a democratic society. Stakeholders who may support MIC-MAC in your community include not only learning organisations such as secondary schools, universities and vocational training providers, but also any organisation whose participants are impacted by disinformation. These stakeholders can include libraries, youth services, organisations working in the disinformation field (for example, content publishers for social and mass media), public authorities responsible for education and training and emerging new media roles (e.g. social media influencers).

Structure and Content of this Document

In Section One, we provide an ***Introduction to MIC-MAC***, including more detailed information on how the pilot course was designed, and what we learned from this. This section will be of interest to course designers, continuing education professionals, and people with an interest in promoting policy to support MI&L of young people and adults.

Section Two, ***Transferring MIC-MAC to Your Organisation***, gives a roadmap on how your own organisation can set up a version of the Course. It's the go-to section for people who are ready to implement your own version of the course. This section is divided into ten different subsections, based on our ten-step transferability framework. These subsections include:

1. Programme familiarisation
2. Understanding educator's needs
3. Identifying key stakeholders
4. Designing the training programme
5. Implementation planning
6. Training programme delivery
7. Mentoring and Support
8. Assessment and Certification
9. Evaluating the Programme
10. Scaling the Programme Up and Out

The transferability toolkit concludes in Section Three's **Summary** with **Final Words** and **Contact information for MIC-MAC**.

Who is the target group for this toolkit?

This toolkit is meant to help communities sponsor their own version of MIC-MAC, to their own group of course participants. Sponsors may include:

- Learning organisations such as secondary schools; universities and vocational training centres; and any community organisation serving young people and adults, where MI&L is a concern;
- Public sector agencies, for example national, regional and local government actors responsible for implementing policies to promote media and information literacy
- Organisations providing services to young people and adults, including learning organisations and community organisations;
- Civil Society organisations – for example NGOs and community groups working with learners and other young people and adults who are risk for the effects of disinformation; and,
- Professional educators working with at risk and marginalized learners.

We further note that the first section of this toolkit provides important information to policymakers on the need for continuous MI&L training in learning organisations and community organisations.

Who is the target group for MIC-MAC?

We label the primary user group for the MIC-MAC course as **educators**. We define this group to be anyone working with young people or adults, in a teaching or training capacity. Educators will include instructors at learning organisations and vocational/training organisations, and will also include people working in community organisations, including youth services, organisations working in the disinformation field (e.g. fact checkers), public authorities responsible for education and training and emerging new media roles (e.g. social media influencers). Our definition of educator is broad, in that the project assumes that anyone working in a field that touches on disinformation could benefit from understanding how young people and adults can acquire the relevant M&IL skills needed to become more 'informationally resilient'. This group definition aligns with the MIC-MAC project, which was designed to respond to educators' needs.

Although MIC-MAC's primary targets are professionals and volunteers working in some kind of teacher or guidance capacity, we note that the course benefits young people and adults who receive support from our primary targets, and, ultimately, the communities in which MIC-MAC trainers and learners live.

MIC-MAC aims to create a dynamic learning community where participants can acquire new skills, share experiences, collaborate, and collectively contribute to the goal of promoting media and information literacy.

Why MIC-MAC?

MIC-MAC is a response to the ongoing, inescapable flood of information that constantly surrounds us. COVID-19 accelerated the penetration of the digital into all aspects of modern life - shopping; supply chains; banking; work; health and education and training. This amplified 'dual exclusion' - a process whereby poor access to digital technologies, limited digital skills and poor quality of digital life are both caused by AND exacerbate social inclusion. Meanwhile the pandemic spotlighted a lack of trust in covid-19 official information and a growing 'infodemically vulnerable' population with not enough of the media and information literacy skills needed to distinguish between reliable and unreliable information. This vulnerability has been linked to structural social inequalities around age, gender, education and income and highlights a broader set of issues around how citizens – particularly those from 'vulnerable groups' – distinguish online fact from fiction, what gaps exist in their media and information literacy skills and how these gaps can effectively be addressed. To help address these gaps MIC-MAC takes a 'train the trainers' approach – supporting educators who work with vulnerable groups to acquire the media and information literacy competences needed to work more effectively in teaching and learning situations, to in turn improve the media and information literacy competences of these groups.

MIC-MAC's objectives

The programme objectives for MIC-MAC were to:

- develop a media and information literacy competence framework for educators working in the informal, non-formal and adult learning sectors;
- develop an online learning programme – using micro-learning and game-based learning – to enable educators to acquire these competences and apply them in practice;
- pilot the programme with 200 educators in four different learning contexts – school-based vocational training, college and further education training, informal and non-formal learning for vulnerable young people and continuing vocational training for adult learners;
- disseminate the project results to a wide stakeholder constituency including policy-makers, educators, youth organisations and the research community; and
- develop a Toolkit for scaling the programme up and out into other sectors, including youth work, journalism and emerging social media sectors.

Why training to promote MI&L is needed

The **presenting problem** MIC-MAC wants to address is the relatively low level of media and information literacy (MI&L) for young people and adults, particularly those most at risk for the effects of disinformation. MIC-MAC's **solution** to this problem is to develop, implement and evaluate an innovative approach to delivering MI&L training for educators and others working with young people and adults, and support them to apply their new skills to work with learners, so these learners in turn increase MI&L, which in turn will improve their life opportunities. In

the long term, MIC-MAC hopes to improve the quality of MI&L in Europe through better targeting of teaching practice that meets the needs of marginalised and disadvantaged learners, those who are vulnerable to the effects of disinformation. The ***expected impact*** of improved teaching practice for learners – in particular disadvantaged learners – is improved digital and media competences; improved life opportunities, including increased employability and access to labour market opportunities; improved social and personal development and increased social and digital inclusion.

The main objective of this Transferability Toolkit is to help programme users adapt this programme to their ***specific*** context and needs - in other words to help them tell their own story and make their own journey.

But, as with any journey - from Star Wars to Lord of the Rings; from Batman to Bambi – the hero of the story (aka the Toolkit User) encounters challenges and obstacles on the way that s/he needs to overcome – by changing the destination of the journey, by changing the route, by finding tools to dig her/his way out of a problem, and so on.

The Toolkit helps the hero overcome these obstacles and successfully reach their intended destination by:

- pointing out the pitfalls that might be lurking along the way
- providing advice on how to overcome these pitfalls
- providing tools to help overcome these pitfalls
- showing real world examples of how other people successfully reached their destination.

Approach and Methodology to designing this toolkit

The approach to developing this toolkit is summarised in Figure 1.

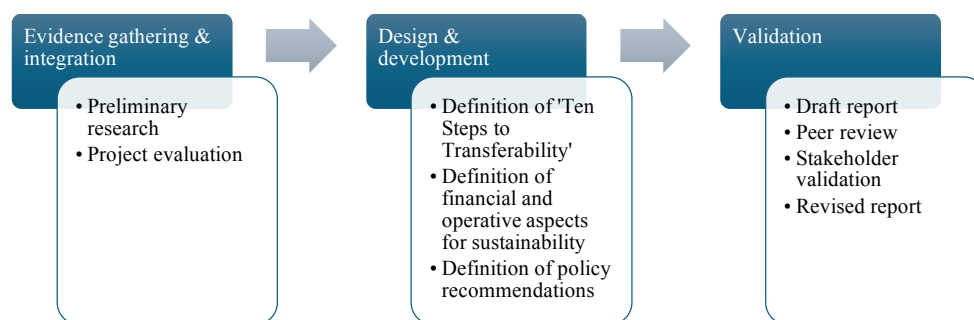


Figure 1: Methodology to develop this transferability toolkit

As Figure 1 shows, the development methodology for this toolkit combines three stages.

Stage 1: Evidence gathering and integration. This stage lays the foundations for design and development of the Transferability Toolkit, through gathering, analysing, triangulating and integrating available evidence. The evidence is drawn from two sources. First, reviewing the results of preliminary research was carried out in the first phase of MIC-MAC. Second, collecting and analysing data on the project evaluation, including 'process' and 'summative' evaluation.

The preliminary research involved two research activities carried out in the first phase of the project – lifeworld analysis and state of the art review. The main purpose of using lifeworld analysis in MIC-MAC was to document and understand the digital experiences and needs of educators, as well as those of young people and adults who are learners. To carry out the analysis, interactive Focus Groups and interviews were implemented involving a total of 66 participants split equally between educators and learners.

The state-of-the-art review aimed to find examples of good practices of digital competence frameworks and training programmes that can be learned from to develop the MIC-MAC competence framework and training programme. The review involved in depth analysis of 69 documents plus 18 examples of good practices projects and over 100 M&IL training tools.

Stage 2: Design and development. This stage applied the results from stage 1 to define the 'Ten Steps to Transferability' needed to deliver the MIC-MAC programme across a range of settings, and to design the financial and operational aspects for sustainability needed to scale MIC-MAC up and out, including policy recommendations on how to ensure that your own programme is sustained for teachers and others working with young people and adults.

Stage 3: Validation. This final stage in the approach starts with the production of the draft version of the toolkit. Subsequent rounds of validation activities – including partner peer review, and review by educators of the draft – lead to refinements and improvements in the finished product.

The following subsections present the results of the Stage 1 activities, focusing on the findings of the preliminary research and the project evaluation.

Results of MIC-MAC's preliminary research into educators' needs

The research phase in MIC-MAC entailed extensive lifeworld analysis research with educators and others who work with young people and adults to explore the central hypothesis – and 'presenting problem' – of the project: that educators lack the digital and pedagogical competences needed to promote a wide ranges of media and information literacy competences for the learners they work – particularly the MI&L teaching competences needed to work effectively with people who at most at risk for the impact of disinformation. In addition, it reviewed in detail 39 examples of good policy support and practices to support the digital competences of educators and vulnerable learners.

This research and its results are presented in detail in the project report, ***MIC-MAC: Competence framework and pedagogic approach***, available from the project website at www.micmac-project.eu. A key objective of this research was to identify the critical incidents and key challenges educators had to deal with in their routine practice as they interact with learners in order to increase MI&L. The research highlighted specific sets of MI&L training needs, and challenges to be addressed, that had hitherto not been sufficiently comprehensively covered in the literature. Some important aspects of MI&L training that educators brought up include the following:

The key challenge for M&IL training highlighted by educators focuses on time and flexibility – there is not enough time built into the curriculum for M&IL work; educators are not supported by their institutions to acquire skills in M&IL and there is no flexibility in their work agenda to develop and deliver new teaching and learning in M&IL. Equally, education and training institutions tend to be resistant to change; are slow to initiate change and do not keep pace with changes in the 'external' world – in particular the rapid evolution of the digital world and the digital needs and behaviours of vulnerable people – particularly young people.

This links to what is seen as a 'skills deficit' in the education and training system, focusing on a lack of key M&IL competences – like critical thinking – a lack of knowledge around disinformation and the skills needed to work with it; and a lack of the skills needed to work with learner 'vulnerability' – for example working with issues like dysfunctional home life; learners presenting with low self-esteem; those presenting with cognitive disorder issues like ADHD and those displaying poor conflict and emotion management skills. The findings from the focus groups and interviews were corroborated by the desk study.

Some key findings from this activity are listed below:

Profound societal and socio-cultural transformations have led to the decentralisation of information, and a consequent reduction in the control mechanisms through which it is shaped, monitored and used. This shift to a 'risk society' has opened up opportunities for echo chambers and other mechanisms to distort and amplify 'reality' through processes like cognitive social learning, peer and influencer pressure and truth manipulation.

Our research has suggested that disinformation is not solely related to content, nor is it domain specific, although much of the phenomenon is focused on areas of health risks (infodemic). Disinformation is related to interactions and behaviours too. This implies that M&IL training requires a combination of core M&IL skills and 'soft skills' like critical thinking and relationship management.

Consumption of information is rapid, and this has led to a need for critical and creative thinking - the ability to choose and accept information selectively, judge its credibility and make informed decisions.

Few competence frameworks have been developed specifically for M&IL - the most well-known being the UNESCO framework. The broader domain of digital competences is more well established and includes several frameworks that cover aspects of M&IL, focusing on digital literacy and citizenship, critical thinking and security and identity.

The overall findings demonstrated that while educators fully understand the need to help learners increase their MI&L, the means by which to do this are often unclear. Educators need flexible approaches, and shorter trainings to help them help others increase MI&L, using pedagogic/training frameworks that are based on real-life learning challenges and real-life experiences that learners have with disinformation and MI&L. The MIC-MAC instructional framework addresses these concerns, and the resulting course, build upon the framework, was found to significantly improve teachers' MI&L teaching competence, overall.

Evaluation of MIC-MAC's pilot course: Key Findings

- The MIC-MAC training programme attracted 500 educators who signed up to participate in it, exceeding the target figure of 200 educators by 250%. Of these 259 - just over 50% - completed the course; 123 – 25% - did not start the course and 118 – 24% - completed part of the programme. Of those who started the course, 69% went on to complete the training programme.
- The average duration of the course for participants who started the programme was 27.4 days, with a median of 26.8 days. The shortest course duration time recorded was 0.1 days and the longest 91.5 days. The minimum time spent on the course reported was 2 hours, the maximum was 336 hours. Completion rates for the nine training programme modules varied from 62% for Module 1 - Conceptual and analytical competences - to 47% for Module 9 - Learning environments for digital citizenship. Completion rates declined progressively as the course progressed. This is likely to be a reflection of participants dropping out of the programme due to factors like time constraints and decreasing motivation rather than an indication of the increasing difficulty of the course.
- Across all 27 MIC-MAC competences covered in the training programme, participating educators improved their competence levels in terms of knowledge and understanding by over 30% overall and between 20% and 45% across the nine competence areas

covered following participation in the MIC-MAC training course. These increases in competence levels were all statistically significant. In turn, educators improved their capacity to apply M&IL competences in their teaching practice by over 30% overall and by a similar figure across the nine competence areas covered. These increases in competence levels were all statistically significant.

- The educators who actively participated in the training programme achieved a high level of competence application outcomes, measured by their ability to apply what they had learned to correctly address a practical challenge posed by the training programme quizzes, with an overall mean grade of 91/100 and no module achieving a mean grade of below 80/100. Participating educators were able to apply the M&IL skills they had acquired in the training programme to successfully complete the three assignments they were required to carry out as part of the programme certification process, with 80% of those who started the course successfully completing the assignments.
- 93% of educators who responded to the Participation Survey agreed or strongly agreed that participation in the programme had improved their understanding of M&IL in teaching and 92% that it could support their teaching practice. 76% of educators who completed the training programme said it was easy to apply what they had learned in the programme to practical M&IL tasks. 97% strongly agreed that what they had learned in the programme was useful in application to their teaching practice. Over 80% intended to apply what they had learned in practice, had made plans to do so or had already used what they had learned in their practice.
- Analysis of data from the Participant Survey, supported by interviews and focus groups, shows that the training programme was rated as a very positive and beneficial experience by the vast majority of educators who took part in it. Over 90% of survey respondents strongly agreed or agreed that the programme was comprehensive and relevant, easy to understand, interesting and motivating, supported continuing professional development needs and was relevant for combatting disinformation. Over 90% rated the programme very good or good on access, navigability, usability and user-friendliness. 52% of survey respondents were very satisfied and 43% satisfied with the learning experience of the programme overall, and for all 9 topics delivered by the training programme.
- Relatively few negative perceptions of the training programme were highlighted by participants. The areas for improvement identified were enhanced feedback and interaction; more videos; additional content; improvements to game interactivity, animations and graphics; more practical examples.

Section Two: Transferring MIC-MAC to Your Organisation

This section is designed to support the transferral of the course into your own learning environment. The Toolkit structure follows a process based on 'Ten Steps to Transferability', as shown in the Figure below. These steps are what are required to help you adapt and transfer the MIC-MAC programme to suit your context and needs.

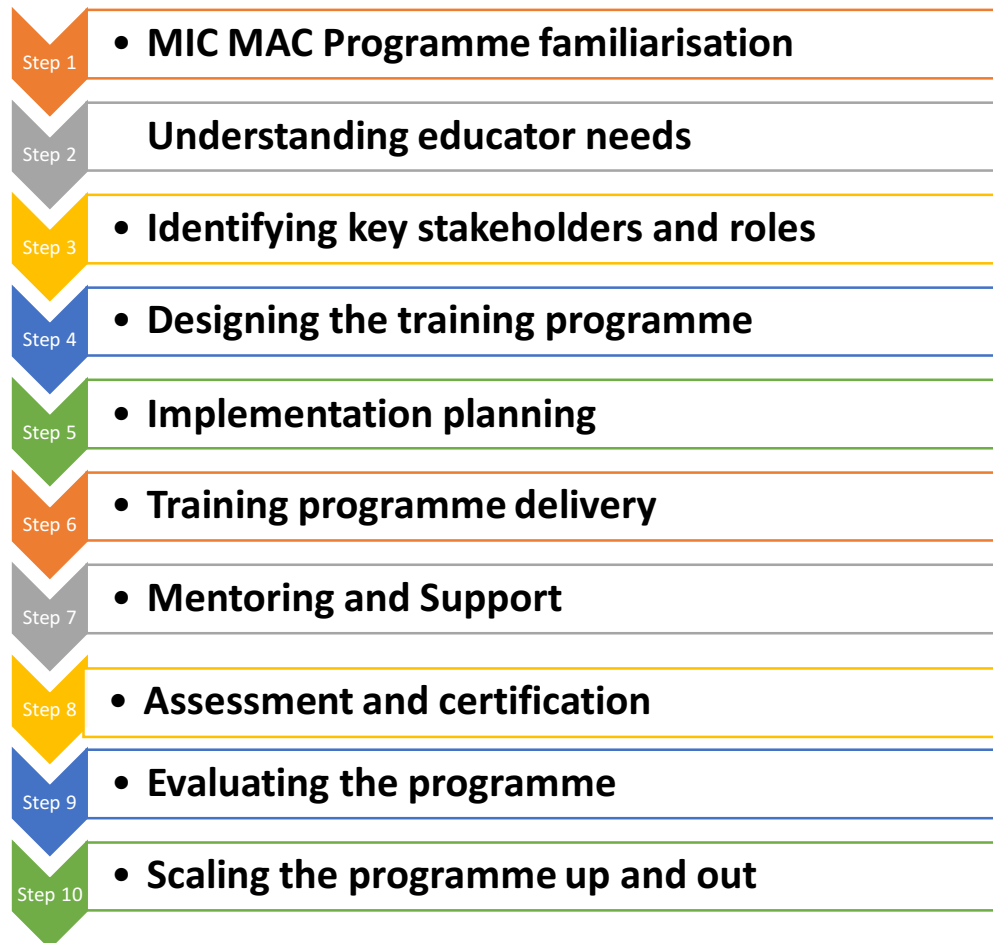


Figure 2: Ten Steps to Transferability

Each step involves a 'primary task' which in turn links to activities that are required to complete the task. To support Toolkit users in completing the task each step provides:
guiding principles to perform the task

- a checklist of activities to be carried out
- pitfalls and trouble-shooting tips, including good practice examples of how to carry out the task and activities successfully

- list of resources (from the 'Resources' folder on website) to support the task and activities

Step 1: MIC-MAC programme familiarisation

Primary Task of this Step

The Primary Task of Step 1 is to familiarise yourself with the MIC-MAC programme and the tools and services it has to offer, so you can then make decisions about how you need to adapt them to the needs of the educators it aims to support.

Guiding Principles

Make sure you and relevant people in your organization familiarise yourselves with the MIC-MAC programme and the tools and services it can provide

Understand that the programme is designed to be flexible - its methodology and tools are adaptable to suit the needs of different kinds of organisations and teacher groups

Read the Course Tutorial and Game Tutorial that are provided on the MIC-MAC website – www.micmac-project.eu - so you know how to run the training programme

Take a tour of the training programme and explore how it works

Checklist of Actions

- | | |
|---|--------------------------|
| Read the MIC-MAC Programme Tour Guide | ☐ |
| Download and read the MIC-MAC Course Tutorial and Game Tutorial | ☐ |
| Take an online tour of the MIC-MAC training programme | ☐ |
| List the tools and services you need and what needs to be adapted | ☐ |

Tools to help you position your organization

MIC-MAC Programme Tour Guide

It's long been recognised that educators need to improve their continuing professional development to acquire the teaching skills needed to promote MI&L in the learner groups they work with. This is particularly the case for educators who work with vulnerable learners – who research shows themselves are more likely to lack the MI&L competences to address the impact of disinformation on their learning, vocational training, and everyday lives. To help address this major problem MIC-MAC aims to support the professional development of educators by strengthening their competences in three key areas: core digital skills; enabling MI&L skills, and the skills needed to work successfully with vulnerable learners. As the diagram below shows, the Programme is made up of three main components, all which feed into and complement each other.



Figure 3: MIC-MAC programme structure

Structure of the MIC-MAC programme

The three components of the Programme are:

- The MIC-MAC Competence Framework.
- The MIC-MAC Training Programme.
- The MIC-MAC interactive game.

A course handbook is available at our website - www.micmac-project.eu - which provides you with a full overview of the contents and learning activities.

MIC-MAC Competence Framework

The MIC-MAC competence framework sets out the digital and pedagogic skills VET educators need to work effectively with learners – particularly those who are vulnerable – in order to in turn develop learners’ digital skills. It was developed using comprehensive research combining a review of state of the art, an analysis of VET educator needs and case studies of competence frameworks in the VET and related fields.

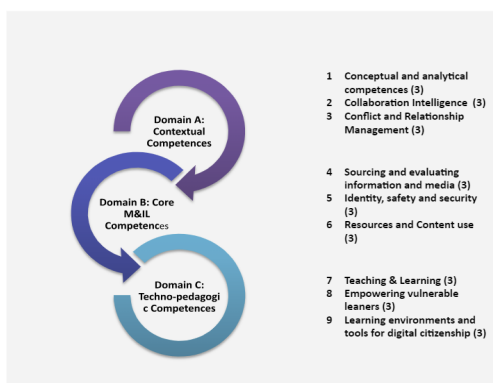


Figure 4: Competence framework

3 domains

1. Core Contextual Competences
2. Enabling MI&L Competences
3. Techno-pedagogical Competences

9 competence areas and 27 progressive competences in total

Each with knowledge, skills attitudes and learning outcomes examples

The framework specifies three ‘high level’ competence domains:

Domain A – Core Contextual Competences. This covers the basic competences educators would need to promote MI&L for the learners they work with

Domain B – Enabling MI&L Competences. This focuses on supporting educators in collaborating with learners to facilitate their acquisition and application of MI&L -related competences

Domain C – Techno-pedagogical Competences. This focuses on three key aspects that are specific to MIC-MAC. Firstly, the need to design and implement MI&L -related learning activities. Secondly, the need to empower learners to develop their own critical thinking and MI&L -related competence. Thirdly, the need to promote MI&L -related competence specific to democratic participation in society at large.

These three domains are associated with nine competence areas. Each competence area covers a set of specific competences, providing 27 competences in total within the framework. Each competence describes the learning outcome associated with it. Examples for each competence are provided, broken down into knowledge, skills and attitude examples.

More about MIC-MAC framework's progression levels

Progression levels are intended to help educators understand their personal strengths and weaknesses, by describing different stages or levels of competence development. The proposed progression approach in the MIC_MAC competence framework works in two ways. Firstly, progression is embedded within the competence framework structure itself, which moves from the acquisition of 'contextual' competences in Domain A, through acquiring the M&IL competences needed to teach in Domain B, to acquiring more advanced and complex competences that support teacher-learner collaboration with disadvantaged learners, in Domain C. Second, each competence within the framework has three levels of proficiency:

- Level 1: Basic level
- Level 2: Intermediate level
- Level 3: Advanced level.

This compresses the six proficiency levels in the European Commission's *Digital Competences for Educators Framework*, from A1 'Newcomers' to C2 'Pioneers' – to three, since the evidence from the review and LWA suggests educators are more comfortable with fewer progression levels. In MIC-MAC, progression levels are incorporated in the Training Course. Each module of the training course incorporates 'quizzes' that use 'situational knowledge-based questions' that assess the extent to which trainees can apply the competences covered by the module in actual teaching practice. These quizzes are graded on level of difficulty corresponding to 'Basic', 'Intermediate' and 'Advanced'. Equally the interactive game requires participating educators to adopt the most appropriate response to classroom situations. By progressing through the different levels in the game, educators demonstrate their increasing mastery of the competence areas on which the training course is based.

The MIC-MAC programme includes a tool that allows participating educators to take a self-assessment test that gives them a picture of their level in each competence. This can be taken before joining and after completing the training. The self-assessment tool helps them to highlight their strengths and weaknesses and can be used to tailor the training to individual

educator needs. By comparing the assessment results before and after training, educators– and their organisations– can get an idea of how far they have progressed in improving their digital and pedagogic skills.

What does the programme contain?

The online training programme maps on to the MIC-MAC competence framework. It provides nine ‘Topics’ – corresponding to the following nine competence areas:

1. Conceptual and analytical competences
2. Collaboration Intelligence
3. Conflict and relationship management
4. Sourcing and evaluating information and media
5. Identity, safety and security
6. Resources and Content use
7. Teaching and learning
8. Empowering vulnerable learners
9. Learning environments for digital citizenship

The training course combines three types of teaching methods, which have been selected to suit the life and work style of educators and their professional development needs – in particular the need to reduce the time and resources required to learn new things in an already crowded curriculum.

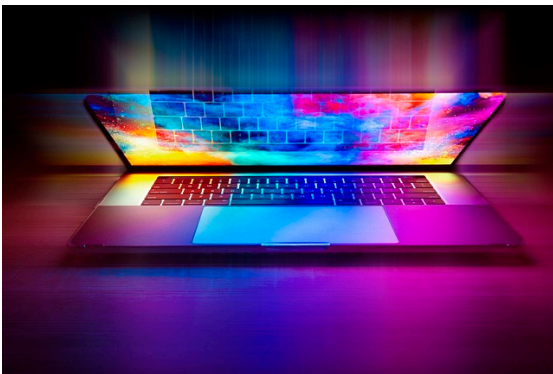


Photo: <https://pixabay.com/photos/laptop-digital-device-technology-5673901/>

The training course combines three kinds of teaching methods and resources:

Micro-training - delivering knowledge through short videos (3-5 minutes duration)

Podcasting - training content in audio format

Written text – ‘traditional’ content that mirrors the podcasts and videos

Micro-training is a training method that delivers knowledge to the learners through short video resources (3-5 minutes duration). Each video resource aims to teach a single learning component and the learning can be put into practice by the users immediately in their day-to-day practice (just-in-time training). Micro-training is a particularly effective tool in the training of professionals who carry out activities in contact with people (professions in the sectors of social health and welfare, education, and personal service activities).

Podcasting (production of training content in audio format) makes it possible to benefit from training resources in multi-tasking mode where ancillary activities do not activate other brain areas (e.g. running, gardening, DIY, manual work, etc.)

Written text complements the micro-training and podcasting by providing ‘traditional’ text versions of those resources – the ‘Book’.

The training course is accessed through a ‘Moodle’ learning platform. (English- and Swedish-language course versions are also available in Canvas Commons.) Participants need to be provided with a login and access keys. They take the competence ‘self-assessment’ test before starting the course and then are free to progress through the course using the platform navigation features.

The three different types of course content are combined together in nine separate training modules that address one of the nine competences of the MIC-MAC Framework. Each module contains learning material that addresses three separate, but related aspects of the module’s featured M&IL competence. Each module begins with a game, where participants are quizzed about a teaching incident related to the content that is covered in each book. The games are an important part of the learning process, as participants are encouraged to return to them after accessing the Modules, to reassess how they would react to a critical teaching incident related to MI&L.

MIC MAC Interactive Game

The game-based learning approach used in the MIC-MAC programme is based on the concept of teaching through repetition, failure and the accomplishment of goals. Just as in video games the player starts off slowly and gains in skill until they’re able to navigate the most difficult levels, game-based learning applies the same concept to teaching. Users navigate their way through the game toward a goal, choosing actions and experiencing the consequences of those actions. They actively learn and practice the right way to do things.

The interactive game is mainly used in MIC-MAC in ‘assessment’ mode. At the beginning of each Training Unit users are redirected to the MIC-MAC online game that will present several interaction scenarios that users will have to solve by applying the appropriate behaviour or response. These scenarios are based on detailed surveys, interviews and focus groups carried out with educators to identify the ‘critical incidents’ they typically deal with, how these situations arise and what strategies educators use to cope with them.



There are 9 game 'scenarios' in MIC-MAC.

Each represents a 'critical incident' and the story of it.

The player is presented with 3 solutions to resolve the incident and asked to choose the right one. Feedback is provided on their choice.

Figure 5: Screenshot of a game scenario

Taking the course for academic credit (or not)

Sponsors of the course have the option to award badges when all the activities in a Unit have been completed. After each Unit test has been completed sponsors may opt to award participants with a Completion of Course badge. We note that during the first 'testing' phase of course implementation, two of the organisations that were participating in the project, University of Salamanca (Spain) and University of Skövde (Sweden) offered versions of the course for academic credit, indicating that the course material is easily adapted into this type of learning environment. However, the course was equally popular with participants who were taking the course for their own interest, in a non-credit giving version.

Summary of course features

In summary, the training course consists of 9 learning modules divided into 3 units, followed by a ninth section containing downloadable versions of course materials including PowerPoints, Podcasts, Texts and Infographics as well as a Tool Glossary. Each of the nine learning modules follows the same format:

- The Game;
- The Module, containing learning contents; and
- An optional Return to Game scenario, to reassess how one would respond to the critical incident portrayed in the scenario.

You can take a virtual tour of the MIC-MAC programme by visiting the project public website and checking out the Course Guide – www.micmac-project.eu - or go straight to the Moodle platform - <https://mailchi.mp/6488f1f2e7c0/micmacfreecourse>

Challenges to implementation, and how to avoid them

Don't assume MIC-MAC is the answer to all your prayers. The programme has been specifically designed to be flexible. It provides a framework and tools to help educators acquire the skills they need to work more effectively with vulnerable learners. You'll need to do some work to

make sure you understand your users' needs and to adapt the framework and tools to suit them.

Don't assume educators will welcome the programme with open arms. Our needs assessment shows that educators sometimes treat professional development programmes with suspicion. They are particularly concerned about the time and 'opportunity cost' involved in taking time out of their non-work life for personal development. Alternatively, they tend to think that their organisations themselves should provide professional development time and, if necessary, pay them for it. It takes time to win the trust and commitment of educators. You'll need to engage them as active co-collaborators in setting up a MIC-MAC programme.

The programme is likely to fail unless it gets the commitment of educators and key stakeholders – particularly management and policymakers. Unless you are in the enviable position of having access to significant funding to start a programme from scratch, you'll need to get partners on board who have the resources you need. These issues are covered below in Step 6.

Resources

- MIC-MAC WP1– sets out the competence framework for MIC-MAC
- MIC-MAC WP2 – provides the training programme content
- MIC-MAC Course Tutorial – shows how to access and navigate around the training course
- MIC-MAC Game Tutorial - shows how to access and navigate around the interactive game

Step Two: Understanding Educators' Needs

The Primary Task of this step in our transferability toolkit is to identify the specific professional development needs of your target group to better develop the MIC-MAC training programme. This task aims to carry out an educator needs assessment.

Guiding Principles

- Be clear who your target users are for the training programme and what their needs are
- Compare your user needs against what the MIC-MAC programme can provide
- Develop a vision for the MIC-MAC training programme that is user-led
- Ensure the program is co-designed in collaboration with your target group of educators

Checklist of Actions

- Produce a categorization of the Training programme user groups ☐
- Produce a user needs analysis for these groups ☐
- List the MIC-MAC tools and services the groups need and what needs to be adapted ☐

Tools to help you understand educator needs

Cultural Probes (Lifeworld analysis)

Cultural probes are used to create a deeper understanding of the context of the users and to map their needs within that context. With a cultural probe, participants record any information about their day-to-day activities or environment which they feel is important to them and which reflects their 'lived experience'.



Photo: <https://www.pexels.com/photo/opened-notebook-with-three-assorted-color-pens-236111/>

Cultural probes can range from writing a diary, taking pictures, from using postcards to notebooks or cameras to take pictures of relevant moments of a user's everyday life. The idea is to capture the 'lived experience' of the user – for example getting an educator to record a video of a week in their working life.

In MIC-MAC a particular form of cultural probe we have used is based on 'Lifeworld analysis'. Its objective is to record 'descriptions of what people experience and how it is that they experience what they experience' (Patton, 1990; Schutz and Luckmann, 1995). Lifeworld

analysis aims to answer these kinds of questions: What does it feel like to be an educator in this particular place and time? What are the most difficult issues and problems educators face in their organisation? Would the MIC-MAC programme give educators more voice and more power to solve some of the problems and issues they face on a daily basis? Lifeworld analysis aims to record this ‘lived experience’ in terms of five constructs:

Construct	Focus
<i>Life-world</i>	The defining features and characteristics of the lifeworld and how the lifeworld is experienced through everyday life – for example how disinformation is experienced through routine activities like checking social media, or how disinformation challenges are experienced on an everyday basis in the classroom
<i>Temporality</i>	How people experience time, both in terms of their broader historical position (for example how does being in a particular point in the 21st century affect disinformation?) and in an everyday sense, for example are there particular times in the day that disinformation reveals itself as a particular challenge?
<i>Spatiality</i>	How people make sense of the world through geographical structures and boundaries (for example, how does access to digital technologies shape the way disinformation is encountered by vulnerable people? Does the classroom environment affect how media and information literacy teaching is/could be delivered?)
<i>Embodiment</i>	Focuses on the body and the physical space in which the body operates. It refers to the actual shape and innate capacities of the human body. It also refers to how people acquire ‘embodied skills’ by dealing with things and situations - how our relation to the world is transformed as we acquire a skill (for example what media and information literacy skills do educators and vulnerable learners have and which skills do they lack?)
<i>Inter-subjectivity</i>	How an individual makes sense of their world and how this sensemaking gets communicated and understood collectively through social interaction. How people and groups interact with ‘the system’ (for example whether and in what ways young people are influenced by their peers in believing ‘fake news’; the extent to which people’s belief in ‘official’ information is correlated with their trust in ‘authority’)

Whatever the type of cultural probe used – diary, video, or even an interactive focus group – the collection of data would cover these five elements. Analysis of the results of the cultural probe will be very useful in subsequently identifying and listing the key needs of the educators related to teaching MI&L-related competence to learners.

Co-creation workshop

The aim of co-creation workshops is to involve educators as active collaborators in developing and improving teaching competence related to MI&L. These workshops are not just a

mechanism for listening to their points of view. They are intended to involve educators as equal partners in the design of task and activities related to MI&L.

There are many ways to design and run a co-creation workshop to explore and work with **user needs**. These include:

- Using sticky notes and flip-charts;
- Presenting a visual story of ideas for the Competences domains that can then be explored together;
- Getting educators to tell stories from their own life experience; and
- Taking a walkabout in a centre in which the training programme will operate and then discussing educator's thoughts and observations.

Whatever tools are used, the format of the workshop would typically go like this:

1. An introductory session
2. A motivational session (what the problem the programme addresses is and how it might be addressed)
3. Icebreakers and short presentation round of participants
4. Production session(s) and co-design activity
5. Specification of challenges
6. Mapping exercises – needs analysis
7. Project Vision storyboard
8. Feedback
9. Wrap-up and next steps

Personas

A persona is a fictitious description of an 'archetype' person who represents a user involved in the training programme. The aim is to provide a vivid representation of the user, so that the MIC-MAC programme can be developed considering these representations. The persona can be described in just a short sentence but typically includes more detail, sometimes supported by visual content, like a photograph or cartoon. Typical elements that could be included in the persona are:

- Fictional name
- Personal information (e.g., age, gender, education, ethnicity, family status, location)
- Profile (e.g., their background, their use of digital technologies)
- Motivation for getting involved in the MIC-MAC programme
- Concerns and needs
- Likes / Dislikes

Table 2 below shows an example of Personas.

	Stella 	Hans 	Laila 	Roberto 
Background	I'm the Head of a large Adult Education College. I'd describe the college as generally good at using digital tools to deliver learning. But I feel there's a big gap in our knowledge about misinformation and how to deal with it. We've also had some incidents recently with students joining far right groups online	I'm a 'second chance education' teacher, working with adults from a range of age groups who have all dropped out of education early. They're sometimes difficult to manage. They tend to get bored easily. I don't know how much of a problem online misinformation is for my group of learners but I feel I need to find out	I'd describe myself as 'tech-savvy'. I use a lot of digital tools in my teaching practice – for example interactive games and class blogs – but I don't have a good understanding of online misinformation. I've recently had some difficult situations with students and fake news.	I work mainly with young people who have a low level of formal education and who need practical support to get them started on a vocational career path. Most of them use social media apps a lot. Particularly Snapchat and Tik-Tok. I don't have a clue how these work
Motivations and Needs	I want to improve the staff's skills in understanding misinformation, how it works and how to deal with it. I want staff to be able to help our students manage misinformation better	I want to find out how to use digital tools to improve my understanding of media and information literacy. I need practical support so I know which digital tools work in different teaching situations to improve media and information literacy.	I want to understand the challenges students face around fake news and how to deal with it in the classroom. I want and which digital tools can help me work with them more effectively in a teaching situation	I want to understand social media technologies from scratch. I need to know the basics – like what kinds of social media do what and what are the dangers using them
How I see the MIC-MAC training programme	It's an online course that allows my staff a lot of autonomy to pick and choose the elements that suit their needs	The programme has to be very practical. It should be less about technologies themselves and more about how I can improve my media and information literacy to improve my teaching	The programme has to have a collaborative focus so I know which tools will empower my learners to work together with me as their guide to handle misinformation	It's an online course that has a lot of guidance and support – particularly technical support – so I can learn at my own pace

Concerns and Challenges	The course will be too complicated for staff and that will lead to de-motivation	The course will be too technical and won't pay enough attention to learning needs and outcomes	My learners will not be motivated or confident enough if I introduce material around misinformation into my teaching practice	The course will be too advanced, and I'll feel out of my depth
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Table 2: Personas used in MIC-MAC

Pitfalls and how to survive them

Over-ambition – MIC-MAC needs engagement and commitment from potential users. Make sure you factor the level of potential educator demand for the training programme into the implementation plan.

Relevance – no matter how well you capture the 'user experience', through using tools like personas and journey maps, the MIC-MAC programme relies for its success on the active engagement of educators. You can model their lived experience, but you won't recruit or retain them unless they see your programme has relevance for their lives and their professional development. They need to take away skills they can use in real professional practice.

Resources

Ashworth, P. (2003). An Approach to Phenomenological Psychology: The Contingencies of the Lifeworld. *Journal of Phenomenological Psychology*, 34(2), 145–156.

<https://doi.org/10.1163/156916203322847119>

Benson, T., Pedersen, S., Tsalis, G., Futtrup, R., Dean, M., & Aschemann-Witzel, J. (2021). Virtual co-creation: A guide to conducting online co-creation workshops. *International Journal of Qualitative Methods*, 20, 16094069211053097.

Dahlberg, K. H. Dahlberg, H., Nystrom, M. (2008) Reflective lifeworld research. 2nd edition. Studentlitteratur

How to do training needs analysis – video <https://www.youtube.com/watch?v=-glpE8kxFPk>
lifeworld. *Journal of Phenomenological Psychology*, 34 (6), 145- 156.

Patton. M. Q. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). Sage. 1990.

Personas Template - <https://miro.com/templates/personas/>

Schutz, A. (1962). *Collected Papers I: The Problem of Social Reality*, Maurice Natanson (ed.). Martinus Nijhoff.

Step Three: Identifying Key Stakeholders and Their Roles

Primary Task

The primary task of this Step is to identify other key stakeholders – in addition to educators – whose involvement will be needed to set up and run a successful competence training programme offering MIC-MAC to participants, and to understand how these stakeholders can best contribute to its implementation.

Guiding Principles

- Ensure everyone with a ‘stake’ in the training programme has a voice in its design and implementation.
- Understand each stakeholder groups’ needs, expectations and what they can bring to the table.
- Make sure the training programme is designed to reflect the profiles of the stakeholders that need to be involved and maximize their strengths and the resources (digital competences and soft skills) they can bring

Checklist of Actions

- | | |
|---|--------------------------|
| Identify and map the key stakeholder groups | ☐ |
| Set up a stakeholder database including key stakeholder contact details | ☐ |
| Produce a categorisation of the stakeholder groups | ☐ |
| Analyse and categorize the members of the database to in terms of stakeholder type; interests; degree of influence and attitude to the training programme | ☐ |
| Create a visual representation of the stakeholder population and their characteristics | ☐ |

The importance of stakeholders

MIC-MAC needs the active involvement of different people and groups to achieve its social and educational impact and, to do so, it needs different stakeholders to play different roles.

We can identify four important reasons to include Stakeholders in MIC-MAC:

1. Their involvement increases the quality and quantity of input and reduces the chances.
2. Encouraging ownership and involvement with the project goals increases the chances of success.
3. Widespread consultation improves relationships and increases their self-esteem.
4. Stakeholder involvement also reduces the chances of misinformation and complaints of lack of transparency.

Generally, when schools and universities think about stakeholders they think in parents, board, students and staff. Given the nature of the MIC-MAC project and its objectives, it is important to include them or consider other stakeholders as well: professional organizations, potential partners, competitors, community leaders, community groups, employees who take students

for work experience, former educators and employees from the sponsoring organisations, volunteers, etc.

Stakeholder variability can be grouped into four broad types:

1. Sponsors or project owners (in this case MIC-MAC course implementation team) are often those who initiate change by mobilizing the resources needed and charging people with the responsibility for getting it done.
2. Change Teams are those charged with the responsibility for executing the change and ensuring it happens.
3. Reference Groups include those people that change teams must refer to in order to arrive at the right solution. They ensure that the change will work.
4. Users are a broad group of people who benefit from the change solution. (Note: The Reference Group and some of the Change Team may also be classed as Users. This is often a good idea).

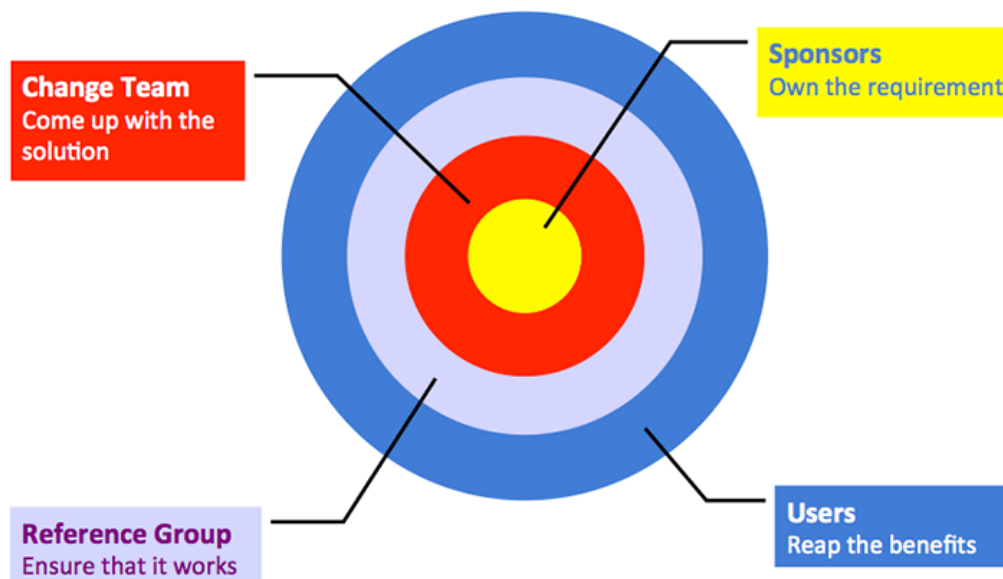


Figure 6: Four groups of stakeholders

In education, *Tutors* conducting the training course represent another important key stakeholder group and their responsibilities include but not limited to conducting needs investigation for training, devising detailed training plan and schedules, organizing and supervising the delivery of session, and conducting post-training evaluations and follow-ups (Dudovskiy, 2013).

Tools to help you identify stakeholders and their roles

Stakeholder Mapping

A Stakeholder Map - or actor network map - is a tool to create an overview of all stakeholders who may have an interest or a role to play in MIC-MAC. Examples cover:

- potential partners who could provide resources – e.g. premises to host the training programme (platform, budgets, etc.)
- networks of organisations/people who could help raise awareness
- potential funders

This tool helps identify who these stakeholders are; what resources they could bring to the programme and the relationships between them. Stakeholder maps can be produced in several ways, but the most often used are either a Stakeholder Table or Network Map.

Name	Type	Assets	Role
Princess Educational Trust	Foundation	Funding Training expertise	Funder Training activities provider
CMT	Community Trust	Premises Staff	Lab host
Parents Association	Association	Good will Access to parents of young adult learners	Awareness-raising
City Hall	Civic Authority	Political networks Funding	Funder Networking
Community Hub	Education	Learning resources	Training provider
Market Traders Assoc	Business Association	Funding	Funder
Anytown University	HE provider	Learning resources	Training provider

Table 3: List of potential stakeholders, example

You may also want to consider doing a network map. The **Network Map** shows a visual representation of the location in which the programme will be delivered, with the key stakeholders situated within it, in approximate distance from each other.

Each type of stakeholder can be represented by a different colour and/or symbol.

Lines show how these different stakeholders are connected.

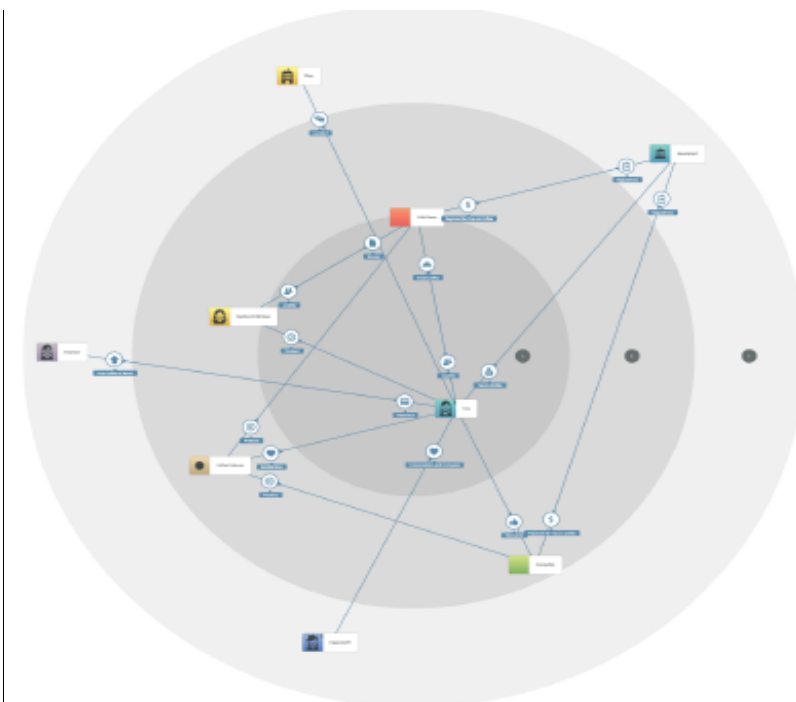


Figure 7: Network mapping

Assessing stakeholder interest and influence: the interest and influence matrix

The next step after stakeholder mapping is to assess the relative importance and influence the key stakeholder groups are likely to have on implementation of the MIC-MAC course. This can help to prioritise the actions that need to be taken to get them involved. You can do this using a different stakeholder map to reflect how the different stakeholder categories are positioned with regard to two indicators:

- Interest – representing an estimate of the interest each group is likely to have in the programme, for example as users, content providers, funders and supporters –
- Influence - representing an estimate of the degree of influence (or ‘power’) each group is likely to exert over the training programme development and future evolution.

These maps can be based on data collected through things like stakeholder surveys, key informant interviews and literature reviews. An example is shown below.

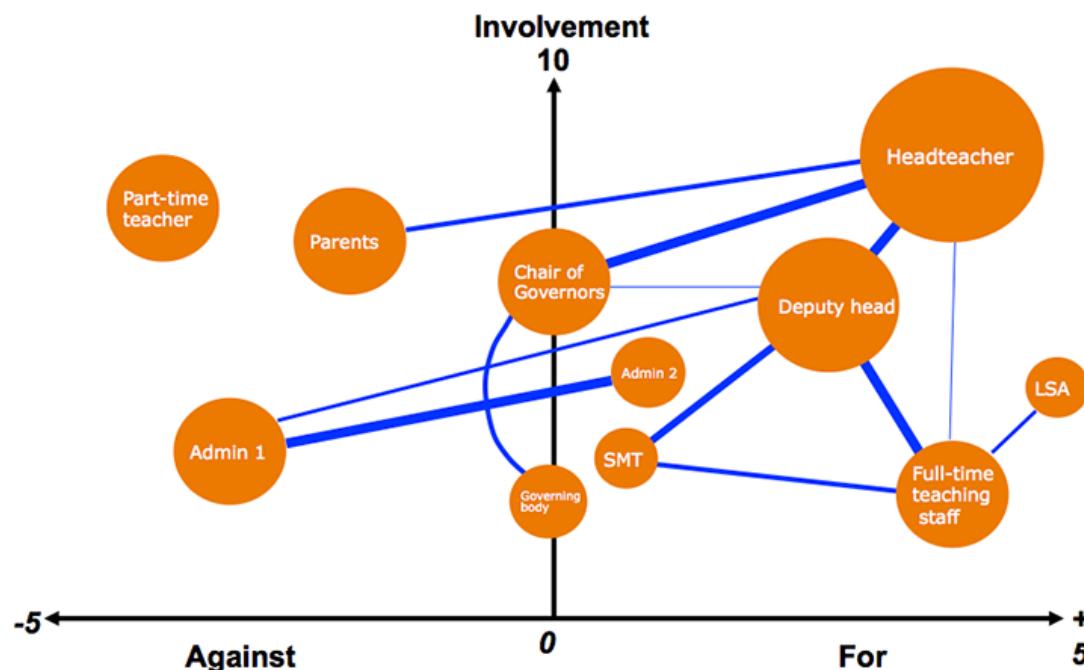


Figure 8: Interest/Influence matrix example

The X axis represents the spectrum of dispositions toward your change project; from Against at one extreme – to for at the other.

The Y axis represents the spectrum of involvement from high at the top to none at the bottom. The Y axis intercepts at the mid-point of the X axis. This represents a position on the X axis equivalent to a neutral disposition – neither for, nor against, the change.

The thickness of line represents the strength of relationship.

The degree to which each stakeholder can influence the change is reflected in the size of the circle used.

Pitfalls and how to survive them

Focusing too much on funding. Although identifying stakeholders with cash is an important part of stakeholder mapping and analysis, setting up and running a successful training programme requires the input of a wide spectrum of actors who represent different interests. Take account of the different perspectives and skills needed in the training programme and target the stakeholder mapping and analysis accordingly. MIC-MAC provides free versions of digital resources licensed under Creative Commons, so the investment in terms of cost for digital resources is minimum.

Lack of good data. Stakeholder mapping and analysis needs to collect and apply information that is robust, and evidence based. To get this information requires a multi-method approach.

This would likely combine desk research – e.g. consulting databases and reports to identify who the stakeholders are – surveys, focus groups and interviews.

Resources

DIY Innovation Toolkit <https://www.nesta.org.uk/toolkit/diy-toolkit/>

Dudovskiy, J. (2013). Key Stakeholders in Training Transfer and their Roles. Available at: <https://research-methodology.net/key-stakeholders-in-training-transfer-and-their-roles/>

Making sense of Stakeholder Mapping. <https://www.researchgate.net/publication/265653139>

Office of Government Commerce Category Management Toolkit, (2006). Category Management Toolkit. London: OGC-

Pangarkar, A. (2022). Here's What Your Stakeholders Think Of Training. Available at: <https://elearningindustry.com/heres-what-your-stakeholders-think-of-training>

Stakeholder mapping. <https://workshopbank.com/stakeholder-mapping>

The 'Influence-Interest' matrix, Murray-Webster R and P Simon (2007).

Step Four: Designing the training programme

This step of the Toolkit applies the results from previous steps needed to deliver the MIC-MAC course across a range of settings, and to support educators in developing knowledge, skills and attitudes related to support learners in developing MI&L -related competence. The previous results transform the needs into a vision and a concrete design.

Guiding Principles

- Develop a vision for the MIC-MAC course that is user-led and applies 'out of the box' thinking
- Make sure the vision aims to solve a clear set of problems and there is a clear understanding of the change the training course are intended to make to that problem
- Translate this vision into a design plan for the training
- Ensure the program is co-designed in collaboration with your target group of educators and other key stakeholders

Checklist of Actions

Develop a vision for your course	☐
Review the vision with users and stakeholders	☐

A tool to help you design the Programme

Your design of your own version of MIC-MAC should be guided by the programme's vision. A vision clearly states what the programme wants to accomplish, and how it will reach its goals. In this section, we present a tool, Mind Mapping, which can be very useful when developing a vision for your MIC-MAC programme.

Mind Map

Mind - or concept - mapping is a graphical technique that aims to illustrate how the design and implementation plan of a program works by showing the relationships between concepts, actors and activities. Most mind mapping approaches start with the "problem statement" in the centre of the map. The program design team then writes ideas/solutions to the problem around this central statement, focusing on "thinking outside the box" to identify new solutions to the problem statement and looking for alternative ways of looking at the problem. The ideas/solutions are then connected using lines/curves. There are a number of software programs available for this purpose, some of which are open source.

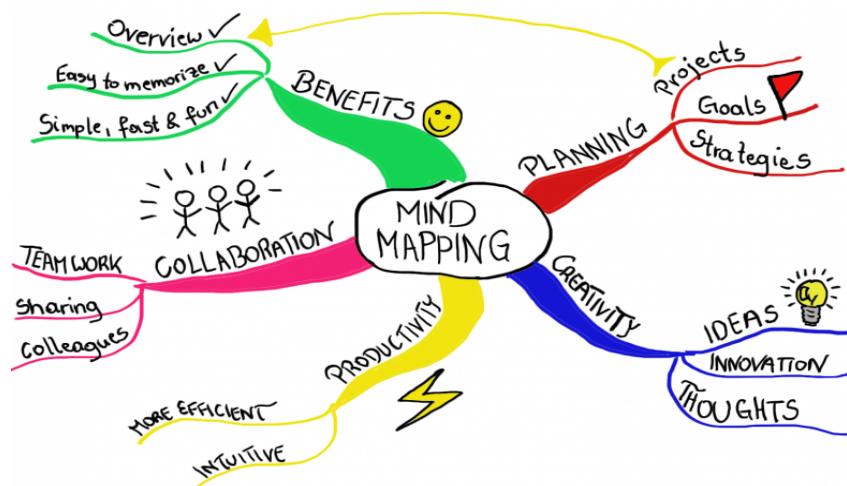


Figure 9: An example of a mindmap. Source: Mindmeister.com

The MindMap typically starts at the centre with the problem or solution (for example, the MIC-MAC course).

Brainstorming the problem then reveals the things that need to go into the design and implementation of the program - such as products, benefits. The mind map then shows the connections between these things.

Design the Programme Tour Guide

Plan to design a Tour Guide to facilitate the expectations of participants. Some design principles you would want to consider for the MIC-MAC programme are:

- FLEXIBLE to fit the pace and training needs of each educator. With basic content and additional information to be deepened in a personalized way.
- PRACTICAL with content applied to the educator's practice, reflection questions or tasks for agile application of what has been learned.
- INTERACTIVE with spaces for dialog through forums, with other teachers or with the MIC-MAC team, to share experiences, reflections or doubts.
- CO-CREATIVE, seeking that the participants are not passive spectators, but co-creative partners in the production, offering opportunities to share and compare case studies and critical incidents related to the competences.

Pitfalls and how to survive them

Awareness-raising – many programmes fail because they are developed in a bubble. It's essential from the outset to engage stakeholders in the programme design and implementation plan. This means active outreach from the start. Even if you only have a sketch of the programme, get it out there – through consultation workshops, social media, informal canvassing - so you can judge the potential level of support and commitment early on.

Risk aversion – a design thinking approach means thinking outside the box, being creative, taking risks. A lot of training and CPD programmes are worthy, but unexciting. The programme

aims to stretch educators by putting them in situations that challenge their ingenuity. Don't be afraid to tap into the ideas of educators themselves.

Resources

A presentation explaining the use and design of theories of change for different contexts:

<https://www.cecan.ac.uk/news/cecan-seminar-theory-of-change>

Designscapes Design Thinking Toolkit' – comprehensive resource on how to apply design thinking with a range of tools to help you do it

https://issuu.com/designscapes/docs/designscapes_toolkit_final

Kotter, J. P. (2012). *Leading change*. Harvard business press.

Mindmapping - bubbl.us; www.mindmeister.com; <https://coggle.it/>

Panke, S. (2019). Design thinking in education: Perspectives, opportunities and challenges. *Open Education Studies*, 1(1), 281-306.

Wentworth, D. K., Behson, S. J., & Kelley, C. L. (2020). Implementing a new student evaluation of teaching system using the Kotter change model. *Studies in Higher Education*, 45(3), 511-523.

Friis Dam, R., Yu Siang, T. (2022). Stage 5 in the Design Thinking Process: Test.

<https://www.interaction-design.org/literature/article/stage-5-in-the-design-thinking-process-test>

Step Five: Implementation Planning

Primary Task of this Step

The Primary Task of this step is to take the training programme developed in the earlier step (Designing the training programme) forward by developing an implementation plan to deliver the MIC-MAC digital inclusion training programme.

Guiding Principles

- Be clear about who is involved in the training and what their roles are
- Understand the different delivery options available for the training and their advantages and disadvantages
- Be aware of the obstacles you are likely to face, for example in the institutional, political and policy environment
- Ensure you have a good idea of the phases involved in setting up the training and implementing it, and the time scales involved
- Select the right delivery vehicle for the MIC-MAC digital inclusion training programme
- Make sure the relevant people in your training organization familiarize themselves with the MIC-MAC digital inclusion training programme and how it can deliver professional development for VET educators.

Checklist of Actions

- | | |
|--|--------------------------|
| Revisit your user needs and stakeholder analysis | ☐ |
| Download and read the MIC-MAC Course Guide and Game tutorials | ☐ |
| Experiment with and explore the MIC-MAC digital inclusion training programme | ☐ |
| Develop an implementation plan for the training | ☐ |
| Develop appropriate management and monitoring systems | ☐ |
| Design the operational systems for running the training | ☐ |
| Identify and specify appropriate roles and role specifications | ☐ |

Tools to help you develop a training implementation Plan

Project Implementation Tools

Project implementation tools translate your project's Theory of Change and Mind/Concept Map (Step 2.2) into an implementation plan that has a logic, a sequence of steps/activities and outputs and a timeline. Typical tools used are:

- Logic Network
- PERT chart
- GANNT chart

Logic Network

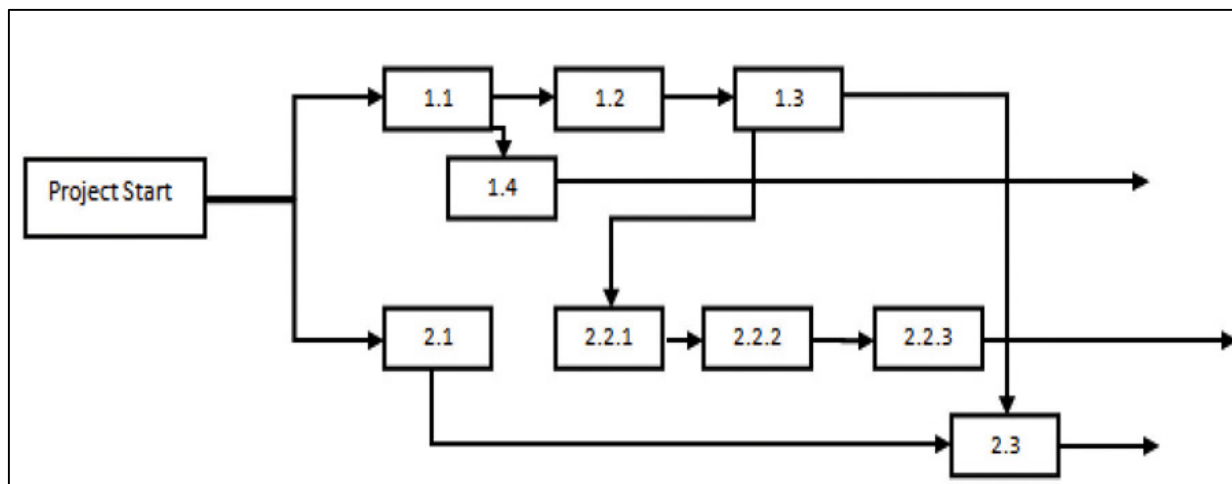


Figure 10: Example of a Logic network

A Logic Network indicates the sequence of activities in a project over time. It shows which activity logically precedes or follows another activity. It can be used to identify the milestones and critical path of a project. It will help you understand the dependencies in your project, timescale, and its workflow.

A PERT chart is another useful way to help stakeholders visualise your programme's implementation. The chart below, from a project called Keystone, shows how a PERT chart can be used in your own MIC-MAC project.

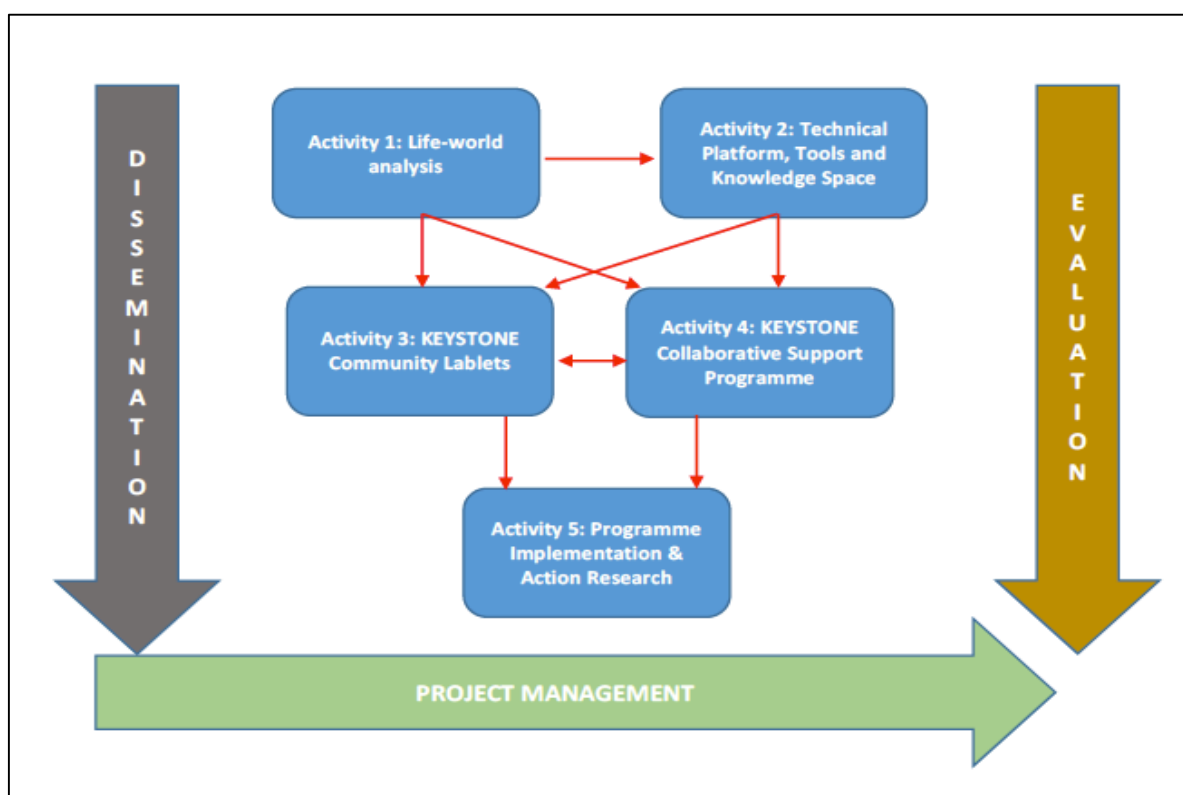


Figure 11: PERT Chart for Keystone Project, as example of this tool

Like a Logic Network, PERT is a method for analysing the tasks involved in completing a given project, especially the relationships between tasks and their inter-dependencies. It shows which tasks need to be done first and which tasks are dependent on others.

A Gantt chart is yet another way to show how your programme will be implemented. Here is the Gantt chart for MIC-MAC, as an example.

ACTIVITIES	START	END	M1	M 2	M 3	M 4	M5	M 6	M7	M 8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18
			Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1.1 PROJECT AND PARTNERSHIP CO-ORDINATION	Month 1	Month 18																		
1.2 ACTIVITY PLANNING AND REPORTING	Month 1	Month 18																		
1.3 MONITORING AND QUALITY SYSTEM	Month 1	Month 18																		
1.4 PROCESS EVALUATION	Month 1	Month 18																		
2.1: REVISIT STATE OF ART AND LWA	Month 1	Month 2																		
2.2: COMPETENCE FRAMEWORK AND PEDAGOGIC APPROACH	Month 2	Month 3																		
2.3: TRAINING PROGRAMME DEVELOPMENT	Month 4	Month 11																		
2.4: TRAINING PROGRAMME IMPLEMENTATION	Month 12	Month 16																		
2.5 TRAINING PROGRAMME EVALUATION	Month 12	Month 16																		
3.1: PROJECT OUTCOMES EVALUATION	Month 17	Month 18																		
3.2: COMMUNICATION AND DISSEMINATION STRATEGY AND TOOLS	Month 1	Month 3																		
3.3: COMMUNICATION AND DISSEMINATION ACTIVITIES	Month 4	Month 18																		
3.4: COMMUNITY AND NETWORK BUILDING	Month 6	Month 18																		
3.5: TRANSFERABILITY & SUSTAINABILITY	Month 17	Month 18																		

Figure 12: GANTT Chart example

A Gantt chart is a project management bar chart that tracks tasks across time. It shows the phases, tasks, milestones and resources needed to deliver a programme.

The tasks are set out in linear format across the programme timeframe from start to finish, with a start and end date shown for each task.

Storyboard/Journey Mapping

Storyboards represent the programme's implementation as a series of key actions the participant takes as they progress through the programme. They help to customize the overall process of the programme to the individual needs of participants/users. You could develop different storyboards for each of the 'Personas' developed so you have a clear visual picture of how different types of user progress through the programme.

Journey Mapping is a more detailed application of the storyboard approach. The map models the 'user experience' of a potential programme participant so the programme design can be customized to represent a step-by-step model of how different types of user experience the programme. A journey map represents a sequence of events, the interaction between the user and the programme, the user's mood in each of the events delivered by the programme and the 'touchpoints' – the moments or spaces in which the user and programme interact - that support the interaction between the user and the services provided by the programme. This step-by-step description is based on the user's point of view. A journey map is a powerful tool for visualising the user experience. It helps the programme designer to understand the context of users, to identify possible gaps in the services the programme intends to provide, and a clear perspective on what potential programme users are looking for and what they want to achieve.

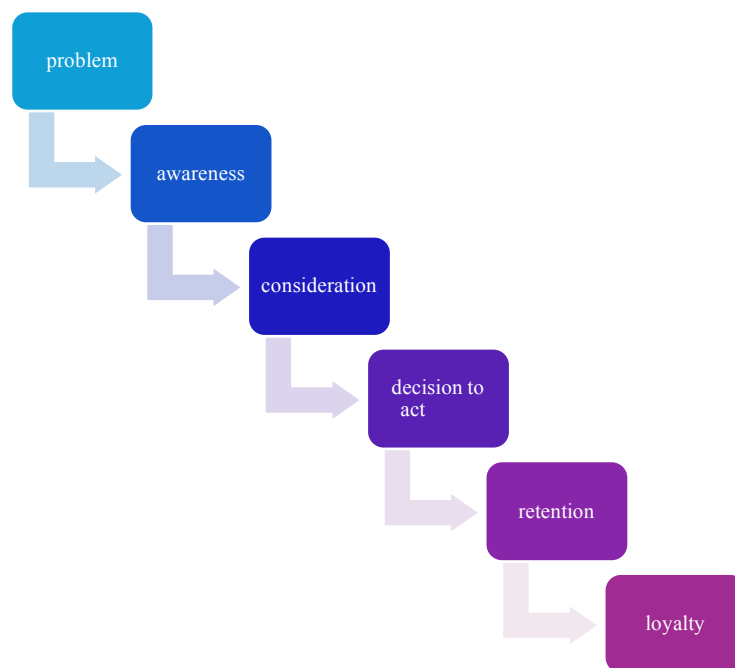


Figure 13: A simplified depiction of the customer journey

The customer journey can be used in developing a new or adapting an existing programme to ensure that different user needs are built into the programme from a user perspective and identify possible opportunities for innovation of the programme. In the example shown above, the journey map represents the student journey through a semester of a Masters course, including indications about the timing of each phase, the milestones and the characteristics of the activities. In MIC-MAC, this journey map could model a user journey through the training programme.

Service Walk-through

Before publicising/Launching the training it's worth getting a small number of users involved in the final validation of the training and programme by running a 'service walk through' with them. The service walk-through is a tool that provides programme designers with a way to understand the experience of a service from the user point of view. The technique uses the 'journey' through the service as a way of getting users to understand how they will experience it. You can use various ways of representing this journey. One way is using 'Lego blocks' to show how the various components of the service fit together. Another way is to literally accompany users through a tour of the physical space in which the MIC-MAC digital inclusion training programme will be delivered.

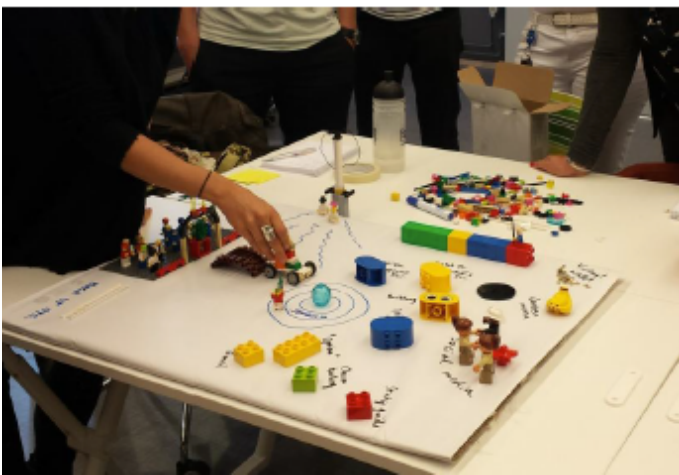


Photo Source: Boletsis, 2018/Designscapes Toolbox

In this example Lego blocks are used to simulate how the programme uses physical spaces to deliver its services and how they connect with each other.

Users are 'walked through' the service using the blocks and their observations – including potential issues raised – are recorded to feed into future service revisions.

Pitfalls and how to survive them

- Don't venture into MIC-MAC's landscape without being prepared. Make sure everyone involved in delivering the training are familiar with the MIC-MAC training programme and the Game.
- Avoid not seeing the trees for the wood. Use MIC-MAC to narrow down your searching to projects that broadly fit your project objectives and target groups.
- Avoid over-ambition.

- Underestimating the implementation costs is another pitfall. Setting up a training programme inevitably entails costs. These come in several forms. Start-up and set-up financial costs; operational costs; etc. Ensure that you have these resources before you begin implementation of the programme.

Resources

Project planning video <https://www.youtube.com/watch?v=K-NuhlmvTxE>

How to sell your project to stakeholders - <https://www.pmi.org/learning/library/selling-project-proposal-art-science-persuasion-6028>

Step 6: Delivering the Programme

Primary Task of this Step

The Primary Task of Step 6 is to familiarise yourself with how to implement your own version of MIC-MAC. In particular this part of the plan focuses on the support services required to help educators acquire the skills they need to help learners increase their MI&L.

Guiding Principles

- Understand that educators require additional guidance and support to that offered through the online training programme and interactive game – particularly pastoral/mentoring support
- Ensure programme sponsors have the appropriate inter-personal and collaboration skills to provide mentoring and support to educators enrolled in the programme
- Make sure that your version of MIC-MAC provides arenas for dialogue and mutual learning for participants and sponsors
- Explore solutions to problems that emerge and are identified by the participants and relate to their lifeworld and lived work experience
- Evaluation is part of the process - for example by observing what happens in practice and recording the outcomes (practical and useful information on evaluation is provided in this Toolkit).

Checklist of Actions

- | | |
|--|--------------------------|
| Identify the need and scope for face-to-face training to complement MIC-MAC | ☐ |
| Identify the training support needs of educators | ☐ |
| Explore problems and solutions with the participants that happen in their practice and provide practical workshops that complement the scenarios covered in the interactive game | ☐ |
| Plan continuing pastoral/mentoring support for participants | ☐ |
| Plan continuous technical support on use of MIC-MAC platform and tools | ☐ |
| Monitor and evaluate the training outcomes | ☐ |
| Reflect on the outcomes and feed into improving the training programme | ☐ |

Tools to help you deliver the training programme

Understanding the needs of the target group



Photo: <https://pixabay.com/photos/meeting-presentation-discussion-4784911/>

MIC-MAC's target group, educators, is characterised by common needs.
They need help to support learners in gaining MI&L - related competence
They want that training to be relevant and linked to 'problem-solving' in real situations.
They want suggestions for learning activities that encourage critical thinking and creativity

In general, we found that educators who want to help learners gain MI&L -related competence require three types of training support:

Learning and developmental support: providing help to enable participating teachers to tailor the programme to suit their background, profile and needs, and to develop at their own pace

Technical support: providing help regarding specific problems with a product or service, for example supporting them to access and navigate the training programme and Game

Pastoral/Mentoring Support: providing personal and social help to participating teachers as well as providing information, advice and guidance. Your version of MIC-MAC should provide support in these key areas: making sure the course is 'owned' by your organisation's leaders; ensuring time for participants' professional development is built into their workplans; providing training to enable them to use the course's resources usefully and effectively.

Providing learning support



Photo: <https://www.pexels.com/photo/group-of-people-sitting-inside-room-2422294/>

A lot of the critical incidents related to MI&L that educators experience come from learners who experience what we call the digital gap- they are not able to identify disinformation, and don't understand why disinformation impacts their own lives and their communities. This implies educators responding to learners in an empathetic way as we promote MI&L in our learning environments. It also implies that educators need support in their own learning to apply that empathy constructively, particularly when discussing MI&L topics with learners where high levels of emotion are likely to occur.

One practical example of how programme sponsors can support educators in gaining MI&L - related teaching competence comes from the University of Skövde. In addition to offering the course as part of their CPD programme, the University also offers multiple opportunities for educators to engage with library staff, to develop and deliver 'tailor-made' learning activities specific to each programme, helping educators help learners to identify trust-worthy information specific to the discipline being taught. These 'on-demand' interactions with the library include librarians delivering face-to-face training with students, drop-in sessions for both educators and learners online, and several training modules, developed by a librarian and researcher, that can be inserted into a course's website. There is also support for digital learning activities related to MI&L and other training needs from the University's Information/Communications Technology section, at educators' request. In addition, the University's Student Support Services (*Studieverkstan*) offers multiple self-enrolling workshops each academic period, and regularly scheduled on-line drop-in sessions, where MI&L competences are emphasised. The coordinated efforts focus on providing just-in-time support to both educators and learners, from multiple support services at the University.

In addition to this type of wide-reaching organisational strategy to support MI&L competence of both educators and learners, your version of MIC-MAC is recommended to have in place a range of learning support services to cater for teacher learning needs. Examples include:

- Assigned mentors to help adapt the programme to individual educators' profiles; provide encouragement and iron out any issues in programme progression;
- Learning plans tailored to individual participants;
- Learning groups, providing peer support for participants; and,
- Tools to support mentoring and the work of learning groups, including a 'Learning Hub' to collect and collate resources; online and off-line discussion areas to support peer group collaboration; dedicated social media channels to encourage collaboration and experience-sharing.

Providing technical support



It's generally thought that teachers are 'technology-savvy' and have in-depth knowledge of devices, digital and media tools such as photo and video-making, as well as social media. However, research in MIC-MAC and similar projects shows there is significant variation across the teaching profession in these skills. More experienced teachers, and those who have been in the same job for a number of years, tend to have a lower level of digital and media competences and need more technical support.

Photo: <https://www.pexels.com/photo/man-in-black-suit-jacket-while-using-laptop-3789100/>

In practice, technical support needs to be provided in the following ways: providing advice on accessing the online learning platform where MIC-MAC will be accessed and ensuring that participants can access learning tools through a help-desk; adapting the course's online learning platform and tools to suit the routine digital behaviours of the target group – for example providing functionalities to enable technical support through different social media modalities like WhatsApp and Snapchat to support collaboration; including training on digital and media skills and use in the training programme learning modules. Most importantly, MIC-MAC sponsors will need to be able to provide continual IT support to participants to cover technical glitches that may occur in programme delivery.

Providing pastoral/mentoring support

Providing teachers with pastoral support in your own MIC-MAC course means providing help, guidance and support in the following areas:

- Mentoring and back up to resolve operational issues – e.g. time pressures and illness
- Support for participants' personal and emotional issues
- Information help desk

An environment that encourages social interaction between participants and course leaders/sponsors – for example through 'away days' and recreational events

Pitfalls and how to survive them

- Pilot-test your version of MIC-MAC with a group of colleagues before offering it to a wider group of participants, to ensure that accessing the course is easy and that content is adapted to your organisation.
- Make sure to create a trustworthy, supportive and safe environment for all participants, where they feel they can share and be heard.
- Don't prioritise the technical dimension of training – the online programme – at the expense of critical face-to-face training.
- Remember different educators have different needs so make sure you allow flexibility in the training programme for personalised learning and learning at the trainee's own pace
- Don't leave participants feeling they're on their own and isolated. Ensure there is sufficient support available, and trainees know how to access it.
- Don't assume all educators are technology-literate. Provide technical support that can cover a range of IT and digital challenges.
- Don't forget to monitor the training process - you will need this information for the programme evaluation.

Resources

EIF Mentoring Guidelines. 2017 . <https://www.et-foundation.co.uk/wp-content/uploads/2021/09/ETF-Mentoring-Framework-Guide-for-Leaders-and-Managers-in-Further-Education.pdf>

Step Seven: Mentoring and Support

Primary Task of this Step

The Primary Task of this step is to familiarise yourself with how to offer mentoring and support to the MIC-MAC course participants. In particular it focuses on the support services required to help educators acquire the MI&L skills they need to be effective mentors.

Guiding Principles

- Understand that educators require additional guidance and support to that offered through the online training programme and interactive game – particularly pastoral/mentoring support to help them overcome any sense of inadequacy regarding their digital skills level and the quality of their teaching
- Ensure that staff providing mentoring and support to educators in the MIC-MAC programme themselves have appropriate inter-personal and collaboration skills
- Explore solutions to problems that emerge and are identified by the participants and relate to their lifeworld and lived work experience related to digital teaching

Evaluation is part of the process - for example by observing what happens in practice and recording the outcomes (practical and useful information on evaluation is provided in Step 5.1 of this Toolkit).

Checklist of Actions

Identify the training support needs of educators	☐
Identify the need and scope for face-to-face training and/or synchronous online training via webinar or videoconferencing platforms to complement the online MIC-MAC training programme	☐
Explore problems and solutions with the participants that happen in their practice and encourage the use of the game scenario editor to represent them and share them with their peers.	☐
Plan optional lesson planning or assignment planning workshops that complement the scenarios covered in the interactive game and the new ones created by the participants.	☐
Plan continuing pastoral/mentoring support for participating educators	☐
Plan continuing technical support on the use of the MIC-MAC platform and tools	☐
Monitor the training process and the participants' results	☐

Tools to help you provide mentoring and support

Understanding the needs of the target group



This target group – educators - is characterised by common training support needs. They need help to manage and deal with the changes brought about by the shift from face-to-face teaching to online teaching, and from analogic to digital teaching tools. They need help that doesn't impact excessively in terms of time and energy into additional training they can't afford. They need help in connecting the training to real situations they experience in their teaching practice. They need a space to exchange experiences with and receive support from their peers in addition to external support.

Photo: <https://www.pexels.com/photo/photo-of-people-doing-handshakes-3183197/>

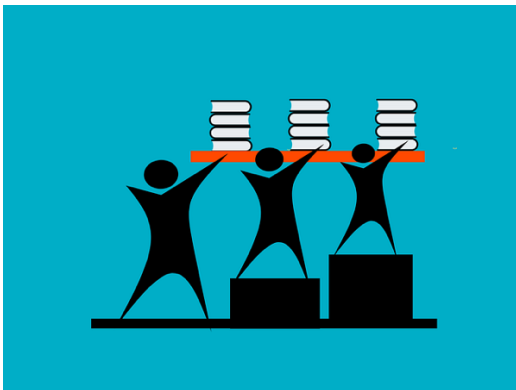
As stated earlier, in order to have a successful programme, educators need three kinds of support.

Learning and developmental support: providing help to enable participating educators to tailor the MIC-MAC training programme to suit their background, profile and needs, and to develop at their own pace.

Technical support: providing help regarding technical aspects such as accessing the training platform, navigating the course, playing the game, developing new scenarios with the scenario editor, etc.

Pastoral/Mentoring Support: providing personal and social help to participating educators as well as providing information, advice and guidance on how to apply digital tools in their real-life teaching practice according to the profiles of their students and the digital equipment available in their organisations.

Providing learning support



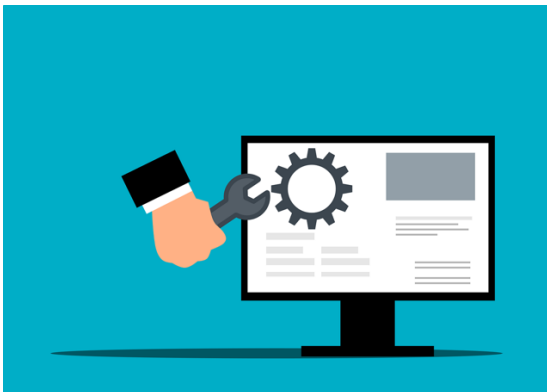
Many of the difficulties educators experience with digital technology comes from the sudden shift many of them had to make from analogic, face-to-face teaching to digital, online teaching caused by the Covid-19 pandemic. This was so sudden it didn't allow time for reflection or self-training, and those who were not already used to incorporating digital tools in their teaching had to shift to digital learning mainly in "on-the-job" mode and/or "trial-and-error" mode, with no time available for exploring tools and technologies and choosing the most suitable to their needs and those of their learners. This situation has not been significantly addressed in the aftermath of the pandemic, with many organisations simply assuming that educators will pick up skills on the job. However, participating in an online programme that is hosted on a platform that may be new to them, and-or participating in game-based learning, as feature in MIC-MAC, will mean that educators may need support in their own learning to familiarise with the programme's digital tools and constructively apply what they learn in MIC-MAC, in their teaching practice.

An example of how educators could be supported to apply their digital skills constructively and effectively is a workshop on digital lesson planning where educators work in small groups, assisted by a mentor, to develop a plan for a flipped learning class on critical thinking, or an assignment for students where they must use several digital tools decided by the teacher to select trustworthy information sources. These workshops could be held in face-to-face mode or online via Zoom rooms, with an ending plenary session where the groups share their work with the other participants and reflect on the experience.

In addition to workshops, other support activities could be:

- a dedicated chat channel for peer support, and
- scheduled Skype/Zoom calls for individual support by a mentor.

Providing technical support, and addressing digital exclusion



Research in MIC-MAC and similar projects shows there is significant variation across the teaching profession in the knowledge of devices and digital and media tools, as well as social media. Older educators, and those who have been in the same job for a number of years, tend to have a lower level of digital skills and to prefer more traditional ways of learning.

‘Digital exclusion’ is typically expressed in three main – and inter-connected – ways: access (e.g. limited access to high-speed broadband and digital technologies); usage (e.g. limited digital and media competences to use digital technologies); quality of use (e.g. limited opportunities to apply digital tools and competences in teaching practice).

Technical support is therefore likely to be needed in situations involving:

- lack of access by educators to digital devices;
- lack of familiarity with platforms and tools (e.g. using Moodle accounts and access codes);
- insufficient digital competences to use the learning platform effectively;
- anxieties about lack of digital skills.

In practice, technical support needs to be provided in the following ways:

1. Support for accessing the MIC-MAC platform and tools provided by an external help-desk available via e-mail (with no need to log into the platform);
2. Support/Peer support Forum within the platform for solving navigation or game play difficulties; and
3. Peer support chat channels.

Technical support in using the platform and its digital tools could be complemented by offering the training contents also in analog format (e.g., downloadable and printable graphics and.pdf documents) as tangible training materials to give a feeling of security to participants who feel anxious about using the platform for learning. It is important to find a way to make even participants who have low digital skills feel at home in MIC-MAC: reading a document on digital tools for teaching with a call could be an alternative way to become more digitalized – a first step towards feeling curious about digital tools and wishing to try one or more of them.

Providing pastoral/mentoring support



Providing educators with pastoral/mentoring support in MIC-MAC means providing help, guidance and support with personal and emotional issues that may arise during the training, such as anxiety due to lack of time, lack of digital skills, low motivation, sense of loneliness caused by the asynchronous training mode, etc.

It is also important to create an environment that encourages peer support and social interaction between participants – e.g., a dedicated chat space.

Pitfalls and how to survive them

- Make sure to create a trustworthy, supportive and safe environment for all participants, where they feel they can share and be heard.
- Don't prioritise the technical dimension of training – the online programme – at the expense face-to-face training if the latter is needed or requested by the participants
- Remember that different educators have different needs so make sure you allow flexibility in the training programme for personalised learning and learning at the trainee's own pace
- Don't leave participants feeling they're on their own and isolated. Ensure there is sufficient support from a mentor available and trainees know how to access it, and encourage the use of peer support tools such as chats and forums
- Don't assume all educators have the same level of digital skills. Provide technical support that can cover a range of IT and digital challenges regarding tools and their application to teaching.
- Don't forget to monitor the training process - you will need this information for the evaluation step.

Resources

The Digital Mentors Handbook – 8 principles of effective digital mentoring 2018-2019 - https://auspost.com.au/content/dam/auspost_corp/media/documents/digital-mentors-handbook.pdf

ETF Mentoring Guidelines 2017 - <https://www.et-foundation.co.uk/wp-content/uploads/2021/09/ETF-Mentoring-Framework-Guide-for-Leaders-and-Managers-in-Further-Education.pdf>

Step Eight: Assessment and certification

This section of the toolkit invites you to think about and make decisions on the best way of recognizing and rewarding people's participation when training in digital competences and acknowledging their contribution.

Guiding principles

Assessment is not about measuring success or punishing participants for failing to meet their targets, because we do not want participants to see assessment as negative. The issues of development and learning outcomes and accreditation are very complex and need to reflect the diversity of the project target groups as well as the relative diversity of the different implementation contexts. For these reasons, assessment and accreditation needs to be shaped by the objectives of the project and its expected outcomes.

Firstly, we need to consider at least four reasons (goals) for doing assessment, and make participants aware of any of them we chose:

Accountability: Assessment can help gather and demonstrate to stakeholders how they perform.

Evidence: Evaluation gathers and analyses information that can then be used to demonstrate success. It helps stakeholders understand who has benefited from their tasks, in what ways, and under what circumstances.

Effectiveness: By monitoring progress, stakeholders can identify problems and issues that need to resolve it, and understand the actions needed to correct them.

Sustainability: Assessment is critical to enabling continuous review and reflection for adapting to changing circumstances. By providing evidence of what works, assessment supports project sustainability for other contexts and stakeholders.

Assessment should not only be used as a retrospective tool to evaluate performance at the end of a project but should be embedded in the activities. This means that assessment should have a developmental purpose in supporting the improvement of the programme design and implementation (ex-ante evaluation); an operational purpose, to track of how it is progressing (on-going or 'formative' evaluation); a summative purpose, to measure what is has achieved (ex-post evaluation); a sustainability purpose, to help learn from the experience and have an impact.

Assessment design should consider not only the purpose of the assessment, but also the resources available to carry it out, who the assessment audience is and what their expectations are, what assessment skills are available in the program, or how long the assessment will take and what it is likely to cost.

The assessment should not only reflect the "expert" view but should take a "participatory" approach - trying to ensure that the voices of different stakeholders and their perspectives are represented - especially those who have less power and whose voices are not often heard. In

this sense, results from the assessment should be drawn from different sources and perspectives and compared through triangulation so that the data reflects a balanced view.

The same for the ways of accreditation, considering the diversity of expectations and needs. Accreditation can be quite 'formal'. For example, digital skills training projects are often linked to formal recognised standards and qualifications – like the EU Digital Competence Framework for Citizens or the European Computer Driving Licence (ECDL). Other projects may have more informal and more flexible objectives. Unfortunately, in the case of MI&L, there is no one universally recognized set of standards and qualifications, for example. Rather than providing strictly formal training – or even informal learning – some projects can be defined primarily as 'empowerment' interventions, whose main purpose is to provide a safe and nurturing environment in which vulnerable people can broaden their digital horizons.

For these more informal interventions, assessment of development and learning should involve self-assessment, based on guided self-reflection of participants, rather than external or 'objective' assessment based on 'testing' procedures. For self-assessment to be effective, project participants need to be involved in decisions about how this definition is operationalized in practice within the project, for example through "self-evaluation" and "self-assessment". Similarly, accreditation of progress and achievements needs to be flexible, reflecting the context of project implementation and the needs and wishes of project participants.

The evaluation cycle with its main phases is suggested below and should be adapted according to the project, the context, time aspects and other issues.

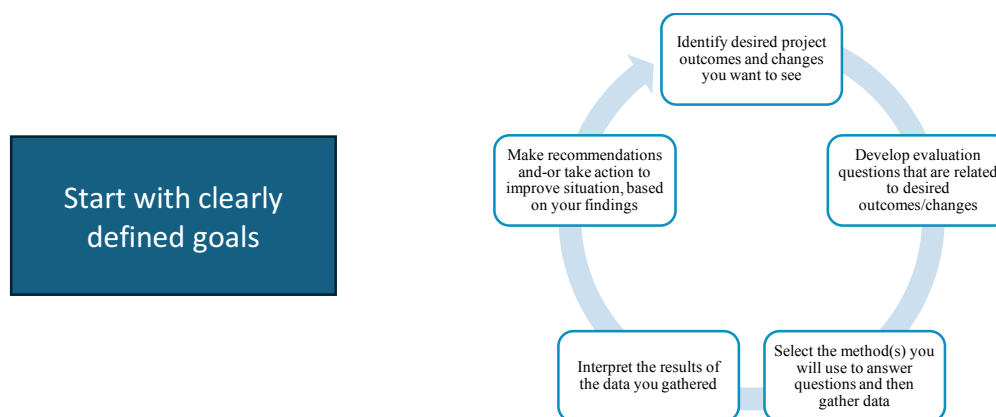


Figure 14: The assessment cycle. (Own elaboration, based on material published by UCLA Student Affairs Information and Research Office, n.d.)

Checklist of actions

Review the project's objectives and expected outcomes and decide the assessment purpose, timeframe, and stages for action.	☐
Work with the target group to establish their expectations of development and/or learning outcomes, using a 'co-creation' workshop approach.	☐
Collaboratively explore innovative ways in which individual and group achievements can be captured and recognised	☐
Produce a plan to make sure progress and achievement is regularly monitored and reflected on as the project progresses.	☐
Decide on indicators to measure results and plan methods for collecting and analysing data.	☐
Determine the resources you will need to conduct the assessment. plan for carrying out the assessment and assign tasks and roles	☐
Establish whether a more formal recognition of participation and achievement – such as a certificate of attendance - would be welcomed by project participants at the end of the project	☐
Put procedures in place to implement any certification that has been agreed with participants	☐

Tools for assessment and accreditation

Self-assessment: is the adoption of shared ownership of and shared responsibility for designing the assessment process and carrying it out. This means that learning, mentoring and support teams need to work with participants to develop and deliver a common approach.

Peer Feedback is essential to ensure that the participant voice is reflected in how the project is implemented, and how it adjusts in its implementation plan if there are problems and challenges that need to be addressed. One useful tool for Peer Feedback is Group Discussions. These provide space for participants to regularly review and reflect on how the project is progressing, issues and problems that need to be addressed and what changes need to be made. These groups need to be highly interactive and democratic, with steps taken to ensure that everyone has a voice.

There are a range of collaborative assessment tools available that are managed by the participant and can be used to show progress and outcomes. These include:

- Personal blogs –online blogs help participants to share their experiences of the project and how they are developing, as well as contributing to improving digital confidence
- ‘Quiz Tools’ – like ‘Kahoot’ or ‘Socrative’ are a fun way of exploring together what has been learned
- Interactive Game –gamification can increase motivation to use digital tools as well as indicate progress
- Learning portfolios – help participants to put together a history of their involvement and showcase their achievements.

As noted above, more formal projects should review existing accreditation routes for digital inclusion – like ECDL. For more informal projects certification can be tailored to the specific project context.

Pitfalls and how to survive them

- Giving the impression that assessment is a form of punishment. People – especially those who are vulnerable – get anxious about doing ‘tests’ and can sometimes feel they are being punished. Assessment should be communicated to participants as a valuable tool for learning, rather than an ‘examination’.
- Choosing the appropriate form of assessment and accreditation to suit the needs of the target group and the project objectives. If the main objective is to improve the target group’s employment opportunities, then a more formal assessment and accreditation approach – leading to a recognized qualification – is desirable. If the main objective is to improve access to online public services, then the focus of the assessment should be on helping the target group to understand where their strengths are and what gaps need to be addressed.
- Not taking account of the presenting needs of vulnerable people. Assessments should be geared to the circumstances and characteristics of vulnerable people. For example, assessment for migrants needs to consider language difficulties that may compromise participants’ ability to understand what is required from an assessment.
- When using self-assessment, a participant’s inability to be realistic about own their achievements can lead to overestimation or underestimation of achievements. It is the job of support teams to provide guidance to participants, so they become aware of how they are doing in relation to their personal development goals.
- Not recording achievements over time. Especially when MI&L projects are the focal point for a broader aim of increasing the social inclusion of vulnerable people, getting participants to develop their own way of capturing their participation – for example through a blog or a portfolio – is not only a good way of doing self-assessment but is a good platform for helping excluded people to transition to further education or employment.

Resources

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Step 9: Evaluating the MIC-MAC course

Primary Task of this Step

The Primary Task of this Step is to design and implement an evaluation plan for the MIC-MAC course (also called the programme here) which will support progress monitoring and the collection of evidence of whether and in what ways the programme works, for whom and under what circumstances.

Guiding Principles

Evaluation should be used not just as a retrospective tool to assess performance at the end of the programme but should be embedded within the programme process from the start to support a cycle of continuous learning and improvement.

This means that evaluation should be used for four main purposes:

1. a *developmental* purpose - to support the programme design and implementation plan (ex-ante evaluation);
2. an *operational* purpose - to help the programme keep track of how it is progressing (on-going or 'formative' evaluation);
3. a *summative* purpose - to help the programme measure what it has achieved (ex-post evaluation); and
4. a *sustainability* purpose - to help key actors in the programme learn from their experience.

There are many different methods and tools for collecting and analysing evaluation data. Each has different purposes and different resource and skills requirements. The evaluation design and plan should take into account 'pragmatic' considerations: the 'object' of the evaluation; the purposes of the evaluation; the resources available to carry it out; who the evaluation audience is and what are their expectations; what evaluation skills are available in the programme, or can be brought in from outside; how long is the timeframe for the evaluation and what is it likely to cost,

The evaluation should not just reflect the 'expert' view but should take a 'participatory' approach - trying to ensure that the voices of different stakeholders and their perspectives are represented – particularly those who have less power and whose voices are not often heard. This means that as far as possible evaluation data should be drawn from different sources and from different perspectives, and compared against each other, through 'triangulation', so that the evaluation reflects a balanced viewpoint.

MIC-MAC is an attempt to address an existing educational problem – that is, to create some level of change in the education system by ensuring that educators have the teaching knowledge, skills and attitudes needed to promote increased MI&L in learners. The focus of evaluation should therefore be on assessing whether and how this change has occurred.

MIC-MAC works – or not - by enabling participants to make different choices in their teaching practices related to MI&L, so a key objective of evaluation is to capture how and why these choices are made.

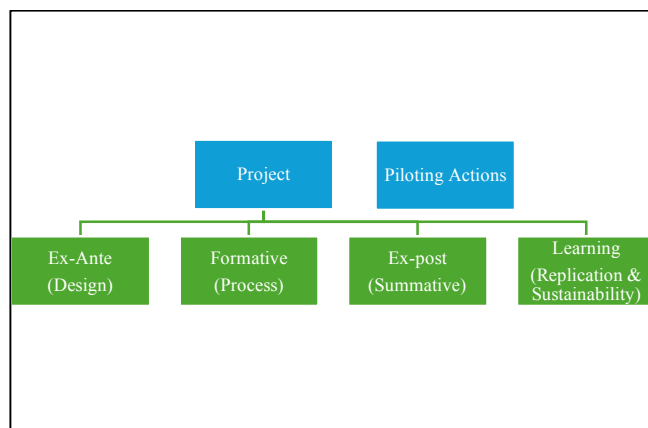
Checklist of Actions

- Identify the evaluation purposes, timeframe and modes of operation ☐
- Decide on who the audiences are and what are their expectations ☐
- List the evaluation questions the evaluation will answer ☐
- Decide on the methods to collect and analyse the data ☐
- Decide on the indicators to measure results ☐
- Work out what resources you need to do the evaluation ☐
- Produce a plan to carry out the evaluation and assign tasks and roles ☐

Tools to help you evaluate your programme

Evaluation Design Template

Evaluation has four main purposes. These correspond to different evaluation ‘modes’ and need to be applied at different stages in the programme. They are: a *developmental* purpose - to support the programme design and implementation plan (ex-ante evaluation mode); an *operational* purpose - to help the programme keep track of how it is progressing (on-going or ‘formative’ evaluation mode); a *summative* purpose - to help the programme measure what is has achieved (ex-post evaluation mode); a *sustainability* purpose - to help key actors in the programme learn from their experience (learning mode). These need to shape the evaluation design.



Just as the programme being evaluated has a life cycle and progresses through different stages, so does its evaluation, and the methods and tools appropriate for each stage of the evaluation differ. The key stages of the life cycle of an evaluation are:

- Stage 1: Mapping and planning
- Stage 2: Implementation
- Stage 3: Reporting and dissemination

Stage 1: Mapping and planning

At the outset, the evaluation needs to identify what are the purposes of the evaluation, who are the audience, and what kinds of things need to be focused on. It also needs to consider the logistics of carrying out the evaluation: what are the settings in which evaluation will be carried out; what people are available to implement it and what skills are available; what communications channels need to be put into place. Following this initial assessment, and evaluation plan should be drawn up which will outline the evaluator's decisions on the choices available.

Stage 2: Implementation

Having developed an evaluation plan, the next stage of the evaluation will inevitably focus on carrying that plan out. The main stages involved in implementation are:

1. Establishing the evaluation criteria that need to be assessed,
2. Deciding on what methods and techniques are to be used for data capture, and
3. Managing and co-ordinating data collection, including analysing the results.

Stage 3: Reporting and Dissemination

Dissemination should not be restricted to the circulation of a final report - especially in the case of 'developmental' evaluations. Different stakeholders may require different communication approaches. These might include:

- Short summaries of the evaluation, tailored to different audiences
- Journal articles for other researchers
- Topical articles in the trade press/social media/blogs
- Workshops for specific audiences
- Feedback seminars for key decision-makers.
- Developing Indicators
- Measures to evaluate impact require the careful creation of indicators. There are four main types of indicators:
 - Critical Success Factors (CSFs);
 - Key Performance Indicators (KPIs).
 - Immediate and Intermediate Outcomes (IMOs) and
 - Key Results Indicators (KRIs).

Your MIC-MAC training programme evaluation needs to combine all four elements in order to assess the success of the project - looking at the big 'wins' at project end; the critical success factors that are needed to make these happen and the key performance indicators that can tell us how we are progressing on the journey towards achieving the desired project results. In between we need to measure two kinds of outcomes:

- Immediate Outcomes – changes in awareness, attitudes and knowledge, and
- Intermediate Outcomes – changes in behaviours and structures.

An illustrative example of these indicators is shown below.

CSFs (activities & outputs)	Research on MI&L -related training programmes and LWA feeds into competence and pedagogic framework and curriculum. Needs assessment identifies competence gaps
CSF indicators	No. of MI&L -related competence frameworks and training programmes in Europe reviewed and analysed
Immediate Outcomes	Increase in partner awareness of drivers, barriers and training needs to promote MI&L in educators and learners
IMO Indicators	Level of MI&L training provided in EU organisations
Intermediate Outcomes	Stakeholders seeking more information about MI&L -related educator training needs and opportunities
IMO Indicators	No. stakeholders receiving information on MIC-MAC research results
KPIs	Progress towards review and LWA targets
KRIs (Impacts)	Increase in need to promote MI&L to learners across EU organisations

Table 4: Overview of Evaluation Indicators**Process dashboard**

The Process Dashboard has four purposes: i) to enable monitoring of programme progress set against key progress indicators, or baselines ii) to provide a picture of where the programme is in relation to the 'change journey' specified in the 'Theory of Change' (and also to review whether the underlying assumptions and hypotheses embedded in the project ToC hold true or need revision) iii) to feed data into the overall summative (outcomes) evaluation of the programme iv) to stimulate review and learning as the programme develops.

The Dashboard is composed of Key Progress Monitoring Indicators – a list of baseline core outputs defined as 'evidence of success', that together build up a snapshot at a point in time of the extent to which the programme is meeting its planned operational objectives. The dashboard and associated indicators are regularly monitored and updated in line with the programme and evaluation life cycle. An integrated spreadsheet containing the process monitoring data can be uploaded to a sharing platform like Google Docs. Data entry and updating enables a 'snapshot analysis' of progress to be carried out, which provides a set of time series assessments that ultimately feed into the overall summative evaluation of the programme. In addition, it should include the KPIs developed for the evaluation. An example of a Process Dashboard is shown in the Table below.

<i>Dimension</i>	<i>Indicators</i>	<i>Status at: (date)</i>	<i>Programme target</i>
<i>Research</i>	No. educators involved in needs analysis		
	No. Stakeholders mapped		
<i>Development</i>	No. of training units completed in programme		
	No. of face-to-face workshops developed		
<i>Piloting</i>	No. Educators recruited to training programme		
	Dropout rate of educators from training programme		
<i>Dissemination</i>	No. visits to programme website		
	No. brochures/leaflets distributed		
	No. contacts on social media		
	No. attendees signed up for seminar programme		
<i>KPIs</i>	% educator survey target reached		NA*
	% target educators reached in training programme		NA*
	Change in website visits		NA*
	Change in social media contacts		NA*
	Growth in partnerships and networks		NA*

Table 5: Process dashboard example

**NA = Not applicable. KPIs do not have targets. They measure progress towards a specified target from a particular baseline.*

Pitfalls and how to avoid them

Try not to be too ‘scientific’. Everyone likes ‘numbers’ – particularly programme funders who typically require evidence that their investment shows value for money. However, MIC-MAC is not a new anti-inflammatory drug. It’s a complex educational and social intervention. ‘Experimental’ evaluation methods – like randomized control trials – won’t work with MIC-MAC. Be pragmatic and realist.

Know your limitations – make sure you have included in your evaluation design and plan estimates of the resources and skills required to carry out the evaluation. Be aware that some evaluation techniques – like ethnographic work and case studies – are more resource-intensive than ‘cheap and cheerful’ methods like surveys.

Avoid evaluation suspicion and resentment – many educators and stakeholders could see evaluation and performance assessment as the same thing. Make sure you explain to all involved that evaluation is about learning, not performance. Get people on board by using a ‘participatory evaluation’ approach so all teachers and stakeholders ‘own’ the evaluation. Don’t be afraid to measure shortcomings and to report on where the training programme objectives fall short. Learning from failure is as important as learning from success.

Choose data collection tools and design data collection instruments that will appeal to your evaluation participants. For example, if you survey young educators, do it through a social media platform they’re familiar with. However, be careful which social media platform you select, as some are now associated with disinformation.

Be SMART – design indicators that are Specific, Measurable, Achievable, Relevant and Time-bound.

Produce results that are relevant and usable – the main objective of evaluation is to learn.

Make sure the learning from the evaluation feeds into ongoing training programme monitoring – so you can take remedial steps if necessary – and into the sustainability plan for the programme.

Resources

A presentation explaining the use and design of theories of change for different contexts:
<https://www.cecan.ac.uk/news/cecan-seminar-theory-of-change>

Step Ten: Scaling the Programme Up and Out

Primary Task of this Step

The Primary Task of Step 10, Scaling the Programme Up and Out, is to plan the organisational and financial sustainability of the transferred programme. In particular, it focuses on how to plan the implementation of MIC-MAC as a course offered by your own organisation for educators.

Guiding Principles

- Ensure to involve organisations and educators themselves in the planning of the course.
- Apply a business planning approach in this phase even though your course will be offered at no cost to participants. This will be helpful during the implementation phase.

Checklist of Actions

Organise a participatory planning survey and/or interviews with stakeholders: including teachers and management/administration to investigate their views on setting up MIC-MAC in your organisation	☐
Adopt and adapt one or more business planning tools	☐
Identify funding opportunities to sustain the course, enabling it to be offered on a regular basis	☐

Tools to help you plan the set-up of the MIC-MAC Course

Developing a business plan for MIC-MAC

We note that most organisations that will sponsor MIC-MAC are likely to be offering the course at no cost to participants. Sustaining a course like MIC-MAC can be better anchored through a business plan to ensure that the main marketing, organisational and financial details are considered. To develop a business plan for the Course we suggest combining Alex Osterwalder's *Business Model Canvas*¹ and a traditional business plan template to cover in detail the **business definition**, the **overall business model**, the **organisational structure**, a basic **cost estimate** and a list of **funding opportunities**.

Business definition

A useful tool for defining the MIC-MAC Course in terms of business is Abell's *Three-Dimensional Business Definition Model*² which is based on providing the answers to the following three questions:

- **Who** are the "customer groups" of the MIC-MAC project?³
- **What** are their needs?
- **How** will the MIC-MAC course deliver its products/services to them?

¹ <https://www.strategyzer.com/canvas/business-model-canvas>.

² ABELL, D.F. (1980). *Defining the Business: The Starting Point of Strategic Planning*.

³ In the case of a not-for-profit initiative such as MIC-MAC it is more appropriate to talk about "users" rather than "customers". Therefore, from now on we will refer to "users" and not to "customers" throughout this document.

The above questions constitute the three **business dimensions** in Abell's model:

1. The **user groups** served
2. The **user needs**
3. The **technologies** used to respond to the users' needs

The answers to the three questions above can be graphically represented by a three-dimensional figure built on three axes, each of which corresponds to one dimension of the MIC-MAC course "business" as in Figure x below.

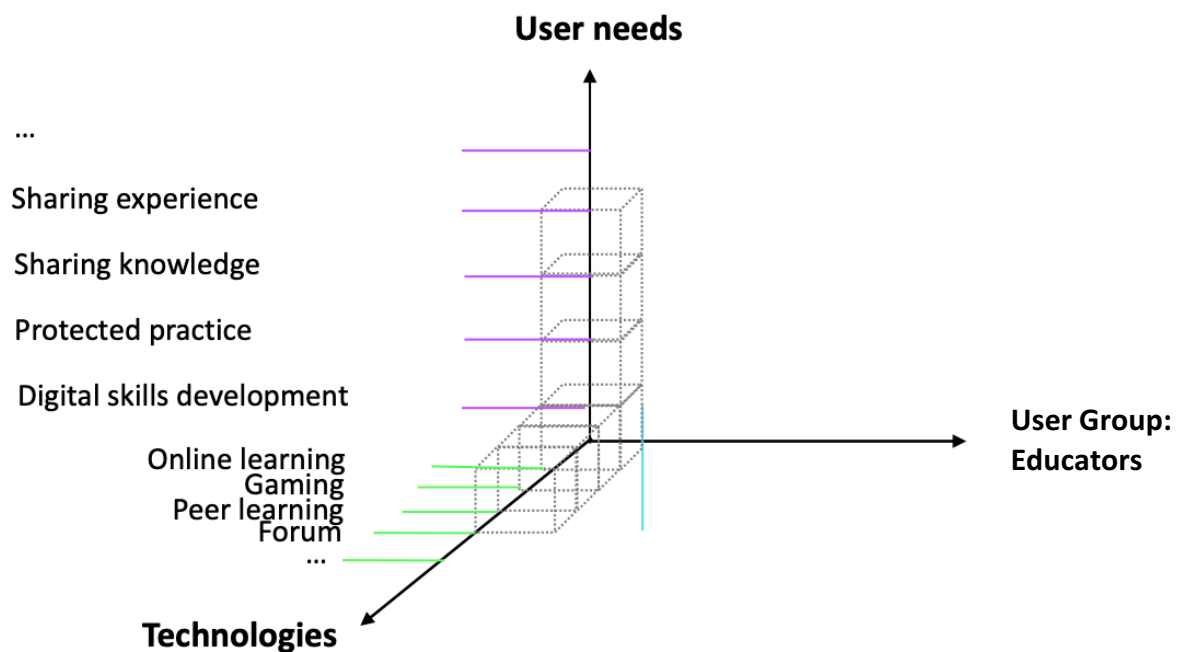


Figure 15: The three dimensions for sponsoring a MIC-MAC course

User groups (Who?)

The primary user group for the MIC-MAC course are educators. We define this group to be anyone working with young people or adults, in a teaching or training capacity. Educators will include instructors at learning organisations and vocational/training organisations, and will also include people working in community organisations, including youth services, organisations working in the disinformation field (e.g. fact checkers), public authorities responsible for education and training and emerging new media roles (e.g. social media influencers). Our definition of educator is broad, in that the project assumes that anyone working in a field that touches on disinformation could benefit from understanding how young people and adults can acquire the relevant M&IL skills needed to become more 'informationally resilient'. This group definition aligns with the MIC-MAC project, which was designed to respond to educators' needs.

User needs (What?)

The user needs related to MI&L -related competences ⁴ that the MIC-MAC course satisfies are the following:

- Digital skills development for teaching
- Protected practice, i.e., the possibility of practising one's responses to situations when one feels inadequate or anxious (e.g., because of their lack of MI&L -related competences, or because one realizes that their teaching method is not suitable to the needs of their students) in a simulated environment.
- Sharing experiences with peers
- Sharing knowledge with peers

Technologies (How?)

The technologies the MIC-MAC Course makes available to satisfy the participants' learning needs are the following:

- Online learning;
- Gaming;
- Face-to-face learning; and
- Forums

The business model shows that the four use functions identified (the users' needs) can be served by as many technologies as per table below.

WHO? User groups	WHAT? Users' needs	HOW? Technologies
Educators	To develop one's digital skills	Online course
		Peer learning
	To practice critical incidents in a simulated environment	Gaming
	To share knowledge with peers	Peer learning
	To share experiences with peers	Forum

Table 6: Four use functions

In addition, a MIC-MAC Course to be set up by individual organisations or groups of organisations could comprise both the online learning and the face-to-face learning components and thus would offer a wide range of services to cover all the user needs identified.

Business model

Below is the Business model for MIC-MAC Courses developed on Osterwalder's *Canvas*.⁵

⁴ Information collected through the Life World Analysis of 141 participants in interviews and focus groups.

⁵ Word implementation by: Neos Chronos Limited (<https://neoschronos.com>). License: [CC BY-SA 3.0](#)

Key Partners	Key Activities	Value Propositions	User Relationships	User Segments
	Key Resources Physical resources: 1 classroom to accommodate at least 20 people. IT and digital resources (minimum equipment): 1 personal computer 5 devices (e.g., tablets) available to users Fast internet connection 1 IWB with video-projector Human resources (minimum staff): 1 Manager 2 external experts n teachers Financial resources Funds to remunerate Course Manager and external experts Funds to remunerate the extra work by VET teachers and educators who choose to participate in the Course.		Channels The users will be reached mainly through their organisations' internal channels such as presentation of the Courses during Teaching Staff meetings and periodical calls for participation issued by the course sponsor. Applicants' selection may be set up according to the organisation's staff training strategy (e.g., in order of application; based on previous training history; based on needs assessment; etc.)	
Cost Structure			Revenue Streams	
Investments (minimum equipment) 1 personal computer 1 video-projector 1 IWB 5 tablets			Investments social crowdfunding donations by Coursedoo.org or similar organisations National or regional funding opportunities such as National or Regional Operating Programmes	

General costs (utilities and services) classroom use electricity costs heating costs cleaning costs internet connection consumables Staff costs Course manager's fees Participants' (teachers) fees External expert(s) fees	General costs (utilities and services) Covered by the organisation's General Costs budget Staff costs School Supplementary Funds - where available Donations by foundations Donations by sponsors (e.g., local businesses who are interested in improving education)
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Organisational structure

As can be seen in the Business Model, a MIC-MAC Course would require meeting spaces (either online or face to face), equipment, and human resources. The most significant organisational requirements are those of human resources and IT equipment as further described below.

A detailed description of each item that composes the Courses organisational structure follows.

Spaces and furniture

For the Courses to deliver both online and face-to-face training a spacious room is necessary, with desks and seats to accommodate at least 20 people and an area for peer learning and circle activities.

It can be assumed that even if not all organisations have the possibility to designate a space exclusively reserved to the Courses activities, all organisations should be able to arrange a sufficiently large space – a classroom or lecture hall – available for “ordinary” Courses activities (autonomous online learning) at least 2 hours a day outside the teaching hours. More complex activities such as face-to-face training and workshops would need to be scheduled, to make sure the premises are available.

IT/digital equipment

During the first implementation year the following minimum equipment would be necessary to allow simultaneous autonomous online training for at least 6 users, and any scheduled face-to-face training sessions:

- 1 personal computer
- 5 devices (e.g., tablets) available to users
- Fast internet connection
- 1 interactive whiteboard with video-projector

The number of devices may be increased in the following years as the Courses develop and attract more users. We note that for self-led training, via asynchronous access to the digital course site, there is still an organisational responsibility to ensure that participants have access to the course.

Human resources

Course Management

To function properly the Courses will need a Course Manager/Coordinator selected among the teaching staff – ideally, the teacher in charge of staff professional development, or an expressly trained member of the teaching staff.

Training design and delivery

Face-to-face training could combine interventions by external experts with others given by the teachers themselves, based on their research activities or experiences that are relevant to the theme of digital teaching. This approach goes in the desired direction of encouraging teachers’ peer learning and developing their self-directed educational design skills.

The minimum Course staffing for the first implementation year would be the following:

External staff (trainers)

1 senior trainer/consultant with proven expertise in MI&L

1 senior trainer/consultant with proven expertise in online education and digital tools for teaching/learning

Internal staff

5 teachers

The sponsoring organisation could explore the possibility to remunerate teachers for their participation in the Courses – both as trainers and as learners, as an acknowledgement for their commitment.

Cost planning

Start-up investments

Setting up a MIC-MAC Course in a school or VET centre requires some investments. The table below presents a tentative investment plan for the first implementation year, with the description of the items, their estimated unit cost⁶ and total cost.

Description	Estimated unit cost (EUR)	Estimated total cost (EUR)
Laptop computer (1)	700	700
Tablets (5)	200	1.000
IWB with projector (1)	1.800	1.800
Total estimated investment costs		3.500

Below is the detailed explanation of the estimated investments. The costs are the average costs for a mid-range item/device.

Laptop computer – this is necessary to support face-to-face training and can be used as additional device for online training.

Tablets – these are necessary for delivering the online training programme to users and for performing research, collaboration and other online activities during face-to-face sessions.

Interactive whiteboard with projector – this complements the laptop computer for performing face-to-face training.

An important note regarding investments is that the purchase of each of the items listed above could be postponed to a later moment and be replaced by equipment already in use at sponsoring organisation during the startup phase (e.g., the computers in the IT classroom could replace the laptop and tablets for online training, and every school probably has at least one IWB).

Basic estimated operating costs

The table below shows the **minimum estimated yearly costs** for maintaining a Course with 5 participants – including remuneration for the participating teachers. This table is to be considered as a starting point for detail financial planning. It reports the essential expenses to run a Course.

⁶ Average prices calculated based on an internet search on mid-range IT equipment prices for the year 2022.

Item of expenditure		Estimated cost per year (EUR)		
		YEAR 1	YEAR 2	YEAR 3
A. Staff costs		6.630	7.430	8.630
1.	<i>Course Manager</i>	<i>1.750</i>	<i>1.750</i>	<i>1.750</i>
2.	<i>External experts</i>	<i>2.880</i>	<i>2.880</i>	<i>2.880</i>
3.	<i>Teachers participating in the Course</i>	<i>2.000</i>	<i>2.800</i>	<i>4.000</i>
B. General costs (utilities and services)		0	0	0
1.	classroom use	0	0	0
2.	electricity costs	0	0	0
3.	heating costs	0	0	0
4.	cleaning costs	0	0	0
5.	internet connection	0	0	0
6.	consumables	0	0	0
7.	webinar/meeting tool	0	0	0
TOTAL ESTIMATED COSTS PER YEAR		7.330	8.130	9.330

Below is the detailed explanation of the estimated yearly costs. Please note that this budget does NOT account for employer expenses, or administrative overhead, and that, of course, salaries should be adjusted to prevailing rates at your organisation.

Staff Costs

Course Manager - The calculation is based on a scenario where 1 person is appointed to manage the Course by performing the relevant activities, e.g., to plan, design and schedule the Course activities, to collect participation requests from teachers, to select external experts, to organise the face-to-face training sessions and to perform any other organisational task that is necessary for the smooth running of the Course. It has been foreseen that the selected person should have a teacher profile. The hourly rate for the Course Manager has been estimated at EUR 25. The estimated effort is 2 hours a week for 35 weeks/year (= 70 hours per year), amounting to a yearly cost of EUR 1.750.

External experts – The calculation is based on 2 senior experts with hourly rate of EUR 90, each of them providing 16 training hours/year amounting to a yearly cost of EUR 2.880.

Teachers participating in the Course – The calculation starts from a number of 5 teachers participating in the Course during Year 1, which increases to 7 in Year 2 and 10 in Year 3, each of them receiving a Course participation fee of EUR 400, amounting to a cost of EUR 2.000 In Year 1, EUR 2.800 in Year 2, and EUR 4.000 in Year 3.

General Costs

The general costs listed in the table have been valorised at EUR 0 since all of them are likely to be covered by the sponsoring organisation's General Costs budget.

Within this framework, the only costs for starting a Digital Skills Course are those for the equipment (see investment table) and for the staff remuneration.

Funding opportunities

The most challenging task in planning a 100% not-for-profit initiative as that of the M&IL Courses in schools or VET centres is that of identifying suitable sources of funding, as these organisations often do not have the financial resources to purchase equipment or hire external experts. Below is a list of possible funding opportunities to be explored.

Social crowdfunding - Platforms such as [Donate My School](#), [Crowdfunder](#), [Rocketfund](#), [Invest My School](#) may be helpful for raising funds by collecting small amounts from a large number of individuals who believe in the project.

Donation of used equipment - Portals such as [Coursedoo](#), [Computers 4 Charity](#), [Equality Action](#) collect used computers for donating them to schools in need.

School supplementary funding - This is additional funding yearly allocated to schools by the Government.

Fundraising from Foundations - One more funding opportunity could be to apply for a grant at a community foundation that has programmes on education. This would be a suitable source of funding for VET centres, most of which are owned by private organisations such as social cooperatives, employers' associations or workers' unions.

Fundraising from local businesses - Small local businesses - especially those which are interested in education, or which operate in an industry relevant to education (e.g., bookshops, training and consulting businesses, etc.) may be another source of funding for vocational schools. Businesses which are members of employers' associations owning a VET centre may be a source of funding for their own VET centres or could provide IT equipment.

Section Three: Resources for Your MIC-MAC Course

MIC-MAC was created with funding from the European Media and Information Fund and project partners gratefully acknowledge their support.

Partners who participated in course development and implementation were:

- AGID, project leaders, Portugal,
- Smart Bananas, Italy,
- Spherical Pixel, Spain,
- University of Salamanca, Spain, and
- University of Skövde, Sweden.

Content was adapted to non-credit giving training courses (all partners), to credit-giving course for experienced instructors (University of Skövde, Sweden), and for credit-giving courses for future teachers (University of Salamanca, Spain). While project partners think the course is best given as a whole, we also encourage the use of material from MIC-MAC in your own courses and trainings. An English-language version of the course is available for access via Canvas Commons, along with the Swedish-language version. The content for MIC-MAC was developed with Creative Commons licensing, with the idea that course sponsors would reuse our texts, graphics, films and audio content. We simply ask that you don't change content or sell it, and that you credit the creators of the material.

You can download the course in its entirety from our Moodle platform, using a Common Cartridge format, which translates well into other Learning Management Systems. English and Swedish language course versions for Canvas are also available via Canvas Commons, with links published in OERCommons.org.

The course is available for preview at [URL HERE](#). Localised versions of the course are published in English, Italian, Portuguese, Spanish and Swedish.

Note that for each version of the course, there is information available linking you to an extensive list of learning resources for each of the learning modules.

Contact Information for MIC-MAC

You can contact MIC-MAC via the project website: or email at: micmacsocialmedia@gmail.com

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