



# Impact Analysis

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**EESI-Digi Project**

UoP Team

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# USING AN IMPACT MODEL

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An Impact Model considers 3 dimensions:

1. Breadth
2. Target
3. Depth



# Purpose of the Study

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The purpose of the study is to explore how the suggested assistive technologies and training material and activities influence SwDs learning and being in the academic ecosystem and in this way, their academic achievement.

It examines the possible influence of other conditions for learning, such as social relations at university and at home, as well as the educational attainment. The study also explores the possible influence that disabilities may have on the academic achievement and on students' perceptions of their environment. It is expected that the findings from the study will initiate discussions about the impact of developed training material and technologies on student learning and promote the provision of favourable conditions for learning, in university and at home, that will be more likely to help students' active and continuous engagement in learning and socialization.

# Assumptions of the Study

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The purpose of the study is therefore to explore how the complex environmental factors influence student learning and in this way, their academic achievement.

It examines the possible influence of other conditions for learning, such as social relations at school and at home, as well as the parental educational attainment. The study also explores the possible influence personal factors, such as gender and age may have on the academic achievement and on students' perceptions of their environment. It is expected that the findings from the study will initiate discussions about the impact of environmental conditions on student learning and promote the provision of favourable conditions for learning, in school and at home, that will be more likely to help students' active and continuous engagement in learning

# Steps to Conduct a Needs Assessment

## 01. Breadth

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Number of people that you reach with your actions. You should also count the multiplier effect.

## 02. Target

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Percentage of the people reached that is actually part of the group you wanted to reach. To find out about this, you can ask people directly, indirectly or use existing statistical data.

## Depth

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How much the lives of this people have changed thanks to you. There are many methods to analyze depth of impact:

Surveys/Questionnaires. Try not to ask too many questions or interest will decrease significantly. Furthermore, include some open-ended questions, that will give you a better insight of the situation you want to analyze.

Focus groups/interviews. These can be useful when you have found a problem through the surveys that you want to understand more in detail or if the topic of is too sensitive to be asked through general questionnaires.

Randomized Control Trials. For these the outcomes are compared between those that received the program and those who did not. These can be particularly useful when you are testing a method/laboratory at school.



# Methods

The research process followed throughout the study. It includes

- (i) interviews template design and validation,
- (ii) survey participants, data collection and analysis and
- (iii) study context and ethical considerations.

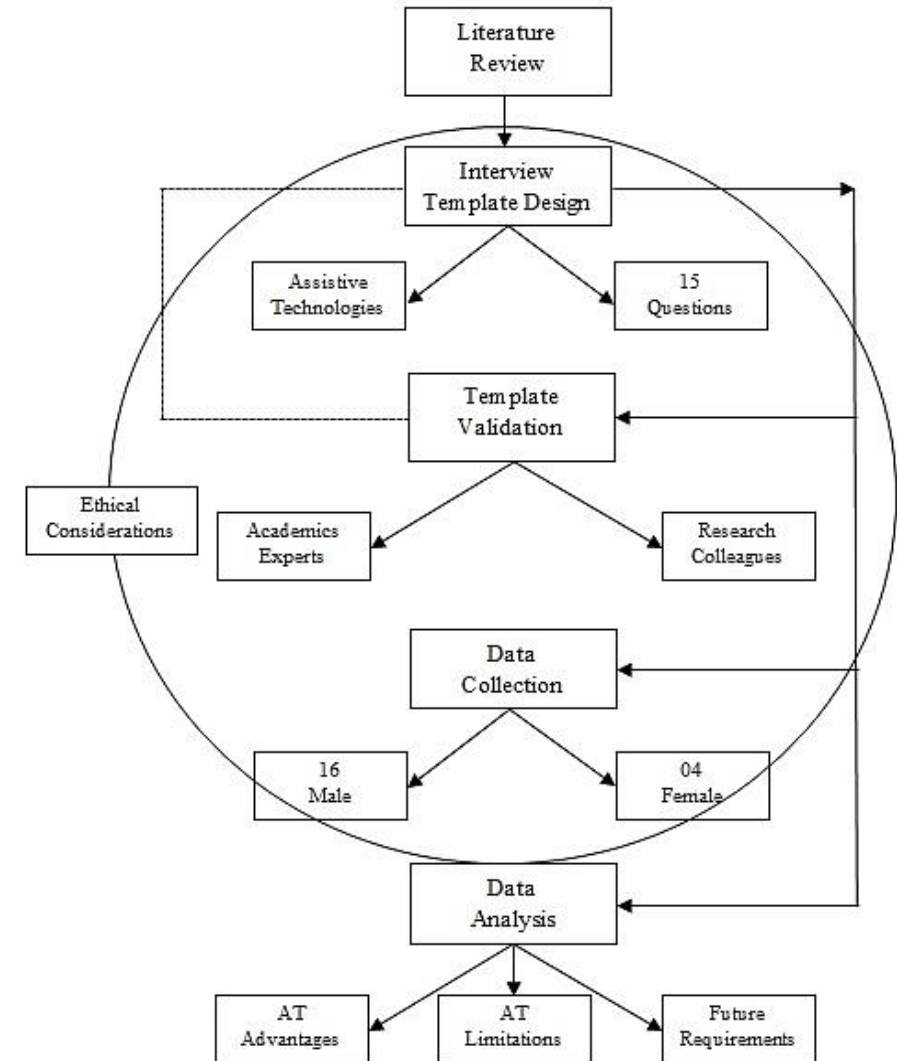


Fig. 1. Research process used for the study

# Critical Components



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**Develop a measurement strategy that aligns with the business**

**Apply a measurement framework that fits the strategy**

**Align the right resources**

**Select the right measures for the organization**

**Ensure the organization is culturally prepared for change**

# How to Measure Learning Impact

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A hybrid method will be adopted based on three valid ways of measuring learning impact. These are

- (i) Learning progress report
- (ii) Balanced scorecard
- (iii) Competency development impact assessment



# How to Measure Learning Impact



## 01. Learning progress report

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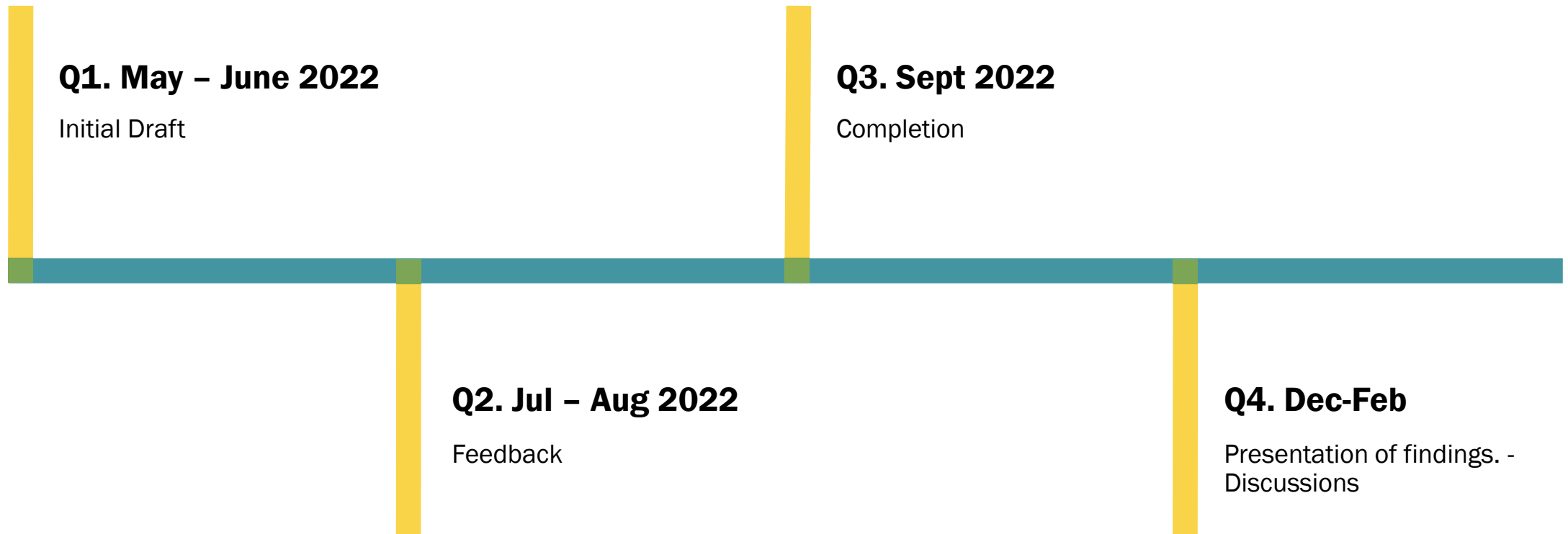
- enables gathering, storing, and communicating of instructor ratings of learner achievement, and individual recommendations for additional learning activities
- ensures field line managers are engaged in the learning process and helps with transfer of learning to the field
- posts completed reports in a learner's LMS history with access only available to the learner and immediate manager, who receive an email with a direct link to the report

## 02. Competency development impact assessment

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- tailor and electronically distribute questionnaires at pre-determined times to ask participants and their managers where they can demonstrate key learning initiatives to make a significant difference in improving performance and results
- gain reporting capability, which reduces the show-stopper time and resources previously required to gather this important data. It is integrated with LMS for ease of use, ease of distribution, data collection, and reporting.

# Timeline



# Analysis of the learning activities

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In this section, we compare the number and metrics of learning activities. We summarised information in each group for the following items to analyse detailed learning activities.

- Learning effect
- Pre-test scores
- Number of times training material to be accessed
- Quiz scores
- Number of answers on quizzes
- Number of empty answers on quizzes
- Elapsed time to complete quizzes

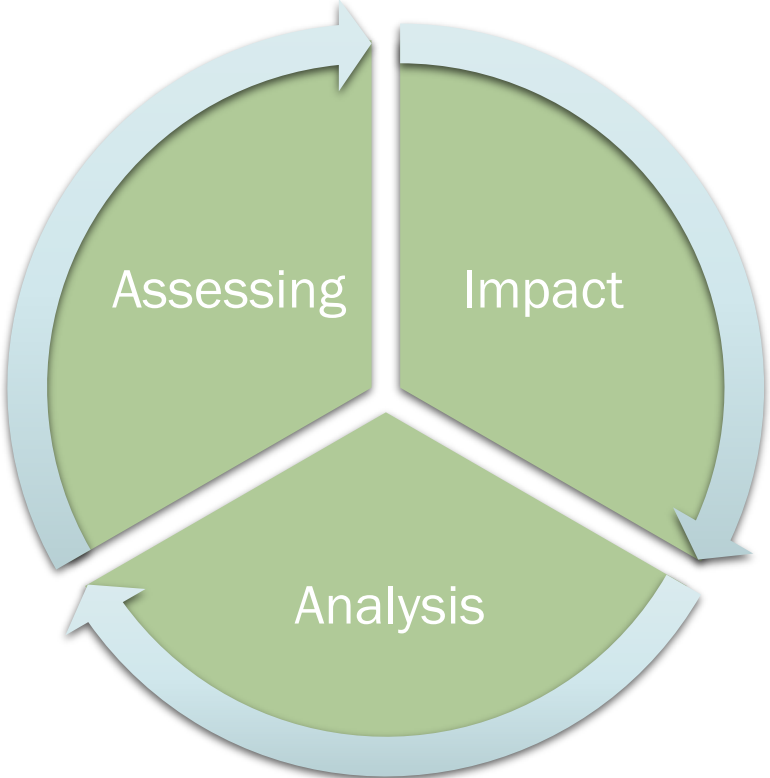
# Training Evaluation Measures

Introduction	Measure	Definition	Method Commonly Used
Training content and design	Learner reactions	Individuals' attitudes toward aspects of training such as usefulness and relevance of content and quality of instruction	End-of-course surveys
Changes in learners	Post-training attitudes	Affective outcomes such as self-efficacy, motivation, and attitudes toward the training objectives	End-of-course surveys
	Training performance	Acquisition of skills	Observable demonstrations of skills (skills tests).

# How are we measuring change?

## Monitor & Evaluate

- ongoing data collection related to planned interventions
- Interim assessment
- Re application of baseline audit with recommendations for sustainability.



## Conduct Surveys

- Stakeholder & Organisation Surveys,
- Interviews,
- desk-based research

Interventions,  
Plans,  
Indicators



Indicators with data collection tool/  
expected evidence

# Measures and data analysis

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Student perceptions and self-reported behaviors will be gathered from the anonymous evaluation (EOCE) surveys, that will be distributed to end recipients after the completion of the training activities. These survey questions will use a Likert scale from strongly agree to strongly disagree, with a neutral option. The surveys will be voluntary and participation is not incentivized.

# Data Collection and Analysis

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Following the collection of quantitative data after data preparation and control, all survey results will be imported in SPSS software for statistical data analysis.

All learners will be invited to be questioned to give different views and opinions. Data analysis of the surveys will then take place through reflection on development of codes and themes.

As Denscombe (2014) suggests, one should follow three major principles for a good analysis. Structuring the data should take place in the initial stage. This is followed by trying to see the link between the aim of the research and what the data has shown and finally, to offer a model by stating how such theory could be improved in the future.

# Training Evaluation Form

Date \_\_\_\_\_ Trainer \_\_\_\_\_

Title of Training \_\_\_\_\_

Location of Training \_\_\_\_\_

**Instructions:** Please indicate your level of agreement with the statements listed below.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The objectives of the training were clearly defined.	___	___	___	___	___
2. Participation and interaction were encouraged.	___	___	___	___	___
3. The topics covered were relevant to me.	___	___	___	___	___
4. The content was organized and easy to follow.	___	___	___	___	___
5. The provided materials were helpful.	___	___	___	___	___
6. This training experience will be useful in my work.	___	___	___	___	___
7. The trainer was knowledgeable about the training topics.	___	___	___	___	___
8. The trainer was well prepared.	___	___	___	___	___
9. The training objectives were met.	___	___	___	___	___

# Questionnaire 1

Two sets of questionnaires will be distributed both physically and through web forms to learners after provided training.



## Post-Training Course Evaluation

### Instructions

Thank you for completing this survey aimed at assessing the effectiveness of the *[insert course name]*.

You recently completed the *[insert course name]*. We request your participation in a survey to assess the effectiveness of the training. Your participation is critical, so please complete the survey between now and *[insert survey response deadline date]*.

Please select the rating that best describes how much you agree with the following statements:

Overall Course	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The course met my expectations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The course occurred at an appropriate time in my career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I intend to use what I learned in this course on the job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. The course will assist me in furthering my career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Overall, I was satisfied with the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Course Content	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6. The course content was comprehensive.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. All course objectives were covered during the course.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The course materials were easy to follow and use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. The course materials facilitated my achievement of the course objectives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. The way this course was delivered [such as discussion/small group exercises or (for CBT) self-paced method] is an effective way for me to learn this content.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Questionnaire 2.1

Two sets of questionnaires will be distributed both physically and through web forms to learners after provided training.

11. What, if anything, would you change in this course? (Select all that apply.)

- Make the course longer
- Make the course shorter
- Reduce the pace of instruction
- Increase the pace of instruction
- Reduce the level of complexity
- Increase the level of complexity
- More exercises
- Fewer exercises
- No exercises
- More discussion
- Less discussion
- No discussion

12. Please select the rating that best describes your confidence performing the following on the job:

	Not at all Confident	Not Confident	Neutral	Confident	Very Confident	Not Applicable
<i>Course Objective 1</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Course Objective 2</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Course Objective 3</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Course Objective 4</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Course Objective 5</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. What changes do you plan to make on the job using the knowledge you gained from this course?

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14. What did you like the most about this course?

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15. What did you like the least about this course?

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# Questionnaire 2.2



Two sets of questionnaires will be distributed both physically and through web forms to learners after provided training.

16. How could this course be improved?

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17. Would you recommend this course to others?

- Yes
- No

**Thank you again for your time and participation!**

# Questionnaire 2.3

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Two sets of questionnaires will be distributed both physically and through web forms to learners after provided training.