EduMAP empirical research, WPs 3 & 4

Research design documents: **Approach to data coding and analysis**

Glossary:

GP – Good practice
CE – Communicative ecologies
AE – Adult education
APC – Active participatory citizenship

Introductory note on public version

This is the fifth of a series of five documents that describe the research design and guidelines used for the multi-partner and multi-sited empirical research carried out in the EU project EduMAP (Adult Education as a Means to Active Participatory Citizenship). Empirical research work has been carried out for the Work Packages (WPs) 3 and 4, focused respectively on *Targeted research on best practices among vulnerable groups* and *Communicative ecologies in the field of adult education*. The research design included data collection and analysis protocols aligned to both WP3 and WP4 objectives, tested through a pilot conducted between December 2016 and March 2017 in Bucharest, Romania.

These guidelines have been used to ensure consistency across the Consortium for the data collection and interpretation. Overall, based on these guidelines, EduMAP partners collected data in 19 EU countries and Turkey, covering a total of 40 adult education (AE) programmes. In addition, eight groups of young people at risk of social exclusion (91 respondents) from seven EU countries and Turkey have been involved in the study to investigate their communicative practices and identify leverages that can be used to improve access to adult education.

The aim of publishing the research design is to offer an exemplar of research guidance used to plan and implement effectively multi-sited and multi-partner research for an interdisciplinary project.

(for more details on datasets and sampling, please consult the EduMAP Deliverables *D3.1. Targeted research on best practices among vulnerable groups*; and *D4.1 Communicative ecologies in the field of adult education*).

Approach to data coding and analysis

1. INTRODUCTION

This document describes an approach to coding and analysis of data resulting from the WPs 3 and 4 of the EduMAP project. In short, the approach starts from the operationalisation of the project research questions, which are then used to develop suitable data codes, and to guide queries for answering the research questions (Fig. 1).
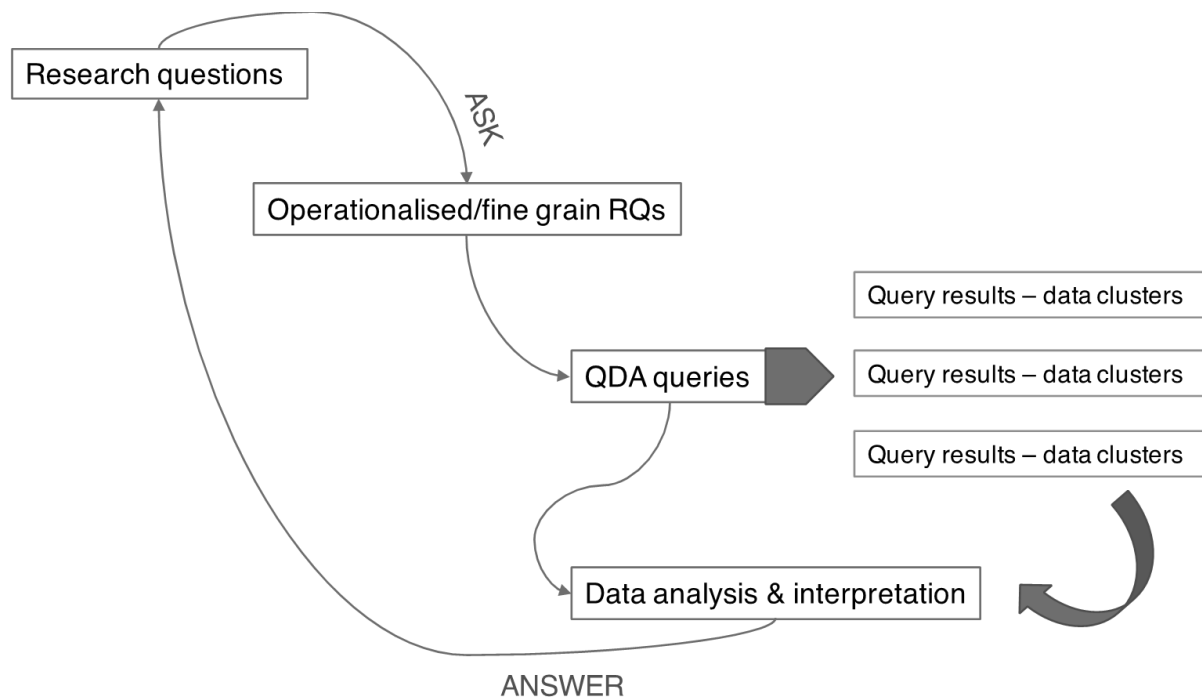
Figure 1. Graphic representation of essential steps in the data analysis process, starting with and getting back to answering the research questions

The process is embedded in a hybrid approach to data analysis, which blends deductive and inductive coding in iterative cycles. For the definition of codes and queries in this case, several iterations have been run for (1) definition of analytical categories and codes starting from the research questions; and (2) data-driven coding on portions of the dataset. Initially, the codes have been developed and tested on a dataset resulting from the EduMAP research pilot run in Romania between December 2016 and March 2017. As field research advanced, the codes have been tested further by all EduMAP partners against fresh datasets, and refined in this process.

As used in the EduMAP project, this document was accompanied by three further guidance documents:
1. A codebook to guide data coding across the Consortium
2. A set of reporting templates with detailed, annotated sections for ensuring consistent field reporting, each focused on a research question (four total)
3. A suggested list of queries to be run in a qualitative data analysis (QDA) software, designed to assist project partners to select and cluster the necessary data to answer the research questions (four

total)

A note on QDA tools and terminology: Coding is independent of specific digital or traditional tools that may be used for coding. However, certain QDA tools such as nVivo may use specific terms, such as for instance *nodes* (for codes). They may also use specific terms for certain types of attributes and features that are helpful to create analytical pathways in the data. In this document, a generic terminology is used as much as possible. However in parts and especially when it comes to queries, some terms and operations specific to a certain QDA tool will be used (specifically, the nVivo QDA programme).

2. ANALYTICAL FRAMEWORK - RESEARCH QUESTIONS AND ANALYTICAL ROUTES

EduMAP main research question is:

What policies and practices are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

This has been further broken down in four research questions to facilitate and structure the research design:

RQ1.1: What <u>practices</u> are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

RQ1.2: What <u>policies</u> are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

RQ2: How can communication inside of and around Adult Education (AE) programmes be improved, in order to:
- ***Reach out to and connect effectively with young adults at risk of social exclusion?***
- ***Enhance interaction and learners' engagement?***
- ***Enhance engagement and collaboration within the AE organisation and with relevant external agents?***

RQ3: What kind of information is needed for policy makers, educational authorities and educators to increase their ability to design/shape policies and programmes that respond to young people's needs?

These questions have been further refined, for analytical purposes, into narrow-scope and more detailed questions, which have been used to guide the coding and the development of queries. This process of operationalisation is further described below for each research question.

RQ1.1, RQ1.2 – focus on needed AE policies and programmes/practices

RQ1: What policies and practices are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

The operationalisation highlights the importance of context embedding of AE policies and practices; for

both policy and practice, it moves from questions that describe state of the art, to improvement via two routes:

1. Identification of effective policies and programmes, and their 'elements of good practice'
2. Improvement in response to newly identified needs and wants, as expressed by the young people at risk of social exclusion addressed.

Context embedding – map contextual understandings, conditions and their impact
What characteristics of the national/local context affect the potential of AE programmes to include young people at risk of social exclusion in A(P)C and how?

- How are core concepts such as A(P)C, vulnerability and AE defined/understood and approached in the context of the study by different respondent groups? [including policy makers, educators, learners, and young people not accessing AE]
- What are the general scope, aims, approaches and key vulnerable groups/conditions of vulnerability targeted in the local AE field?
- What socio-economic, political and legal factors/processes influence AE programmes and practices?

Further, we have focused in turns on AE programmes (RQ1.1) and policies (RQ1.2).

AE PROGRAMME FOCUS

Elements of good practice – learn from existing successful AE programmes
What can be learnt from existing AE programmes that are successfully supporting young people at risk of social exclusion to exercise APC?
Map AE achievements/results in terms of APC

- How do AE programmes contribute to enabling learners to participate in social, political and economic life?
- What types of competences are acquired by learners in such programmes and how do they relate to APC?

Investigate elements of good practice

- What elements of AE programmes can be linked to positive results/impacts on learners in terms of APC?
- What approaches, strategies, pedagogical methods and techniques, and enabling conditions can be identified that can help improve future AE practice?
- What supportive services are offered in AE programmes and to what effect?

Explore needed/existing educator competences

- What competences are necessary for AE educators to successfully support Young people at risk of social exclusion to exercise APC?
- What kind of formation/professional development courses and programmes are useful for better preparing AE educators to work with Young people at risk of social exclusion?

Improving access to AE for young people at risk of social exclusion
How can AE be designed to better respond to the needs of diverse young people at risk of social exclusion?

- What kind of educational/AE needs for APC emerge for diverse young people at risk of social exclusion?

- What challenges/barriers to AE are there for young people at risk of social exclusion?
- What motivates young people to take AE courses?
- What role do professional aims/plans/aspirations play in relation to young people's access to AE and motivation to engage in AE?

AE POLICY FOCUS

Identify influential and successful policies, challenges and routes to improvement
How do local/national/regional policies and regulations influence the AE field and practices?
- How do policies/regulations affect the AE programmes studied?
- What policies/regulations have had/are having positive impacts on AE for APC?
- Which ones are challenging?
- How can policies/laws/regulations/governmental measures be improved to create favourable conditions for AE for APC?
- How are gender issues accounted for in specific policies and programmes relevant to AE for young people at risk of social exclusion and APC?

RQ2 – focus on improving communication practices between AE and young people at risk of social exclusion

RQ2: How can communication inside of and around Adult Education (AE) programmes be improved, in order to:
- ***Reach out to and connect effectively with young adults at risk of social exclusion?***
- ***Enhance interaction and learners' engagement?***
- ***Enhance engagement and collaboration within the AE organisation and with relevant external agents?***

Queries for these questions are aided by an incremental question posing going from:
1. Description of existing practices of communication
   - Among young people at risk of social exclusion – spanning access to information about AE, professional opportunities and informal/everyday communication
   - Among AE providers, spanning strategies, institutional communication, and communication for recruitment and during and after course
2. Identification of matches and mismatches between AE providers and Young people at risk of social exclusion, in different contexts – recruitment, during course, after course
3. Ways of improving communication and information provision/access, by:
   - Singling out both problematic and effective practices of communication by AE providers
   - Leveraging practices of communication and access to information by Young people at risk of social exclusion

EXISTING PRACTICES OF COMMUNICATION

Communicative practices of young people at risk of social exclusion
- What patterns of communication and information access (people, media, platforms) can be identified in young people at risk of social exclusion everyday communication? What about

professional contexts of communication?

- How do young people at risk of social exclusion access information about AE and professional opportunities?
- What role do social networks/relations play in information and communication for AE, education, and job seeking?

Communicative practices of AE providers

Communication strategies
- What strategies of communication are adopted among AE providers? [approach, targets, media, channels, platforms, messages]
- How do AE providers communicate with other institutions/stakeholders whose role is important for their activities?
- How do AE providers communicate their courses/programmes? [media, channels, messages]

Recruitment communication
- How do AE providers communicate (directly with young people or with mediating agencies) to recruit young people at risk of social exclusion for AE courses?
- What is the response to existing communicative strategies and practices for recruitment?

Communication during course
What typical patterns of communication during course can be identified at the level of:
- Educator to student communication
- Student to student communication
- Course information provision

Communication after course
- What typical patterns of communication after course completion can be identified?

MATCHES AND MISMATCHES IN COMMUNICATION PRACTICES
Identifying matches and mismatches between AE and young people's communicative practices

Recruitment communication / reaching out to young people at risk of social exclusion
- What are the matches and mismatches between AE communicative practices during recruitment and young people's communication and information access practices?
- What strategies and practices of communication for recruitment are effective? Which are problematic?

Communication during course
- What effective strategies and patterns of communication during course can be identified?
- What problematic/challenging patterns of communication during course can be identified?

Communication after course
- What effective strategies and patterns of communication after course can be identified?
- What problematic/challenging patterns of communication after course can be identified?

ROUTES TO IMPROVEMENT
Improve connections between AE and young people at risk for more effective AE communication

Recruitment communication / reaching out to young people at risk of social exclusion
- How can AE programmes communication strategies be improved to reach out effectively to young people at risk of social exclusion?
- What patterns and tendencies in young people's communication practices (people, media, channels, platforms) can be leveraged to improve AE communication and reach out?

Communication during course
- How can communication during AE programmes/courses be improved at the level of:
    - Educator to student communication
    - Student to student communication
    - Course information provision

Communication after course
- How can communication after completion of AE programmes/courses be improved?

RQ3 – focus on work process and information needs in the design of AE policy and programmes

RQ3: What kind of information is needed for policy makers, educational authorities and educators to increase their ability to design/shape policies and programmes that respond to young people's needs?

- What landmark stages/processes can be identified in the work process for designing and shaping new policies and educational programmes?
- What types of information are accessed/needed during design of AE policies and programmes?
- What information gaps are there?

3. CODING

Two categories of codes have been used:
- Thematic codes
- Case codes (or nodes)

3.1 Thematic codes

To ensure comparability and relatedness among data and findings from different country contexts, a consistent process of data analysis has been shaped and adopted across partners, based on a common library of codes. The project took a hybrid approach to data coding and analysis based on a combination of deductive coding (operationalised from the project research questions and conceptual framework) and inductive coding (new codes developed from collected data). This approach ensured alignment with the project's research objectives and questions (by using deductive codes), whilst maintaining openness for new insights to come from collected data (through inductive coding).

Initially, the master codebook was developed by WP3 and 4 teams and tested on the dataset from the pilot project conducted in Romania. After two rounds of partner testing and feedback, the codebook was finalised and shared across the consortium in December 2017.

In addition to the list of parent and child codes, the process of coding and analysis by partners was facilitated by visualisations that show the relations among clusters of codes and the key research questions of the project (Figures 2, 3).
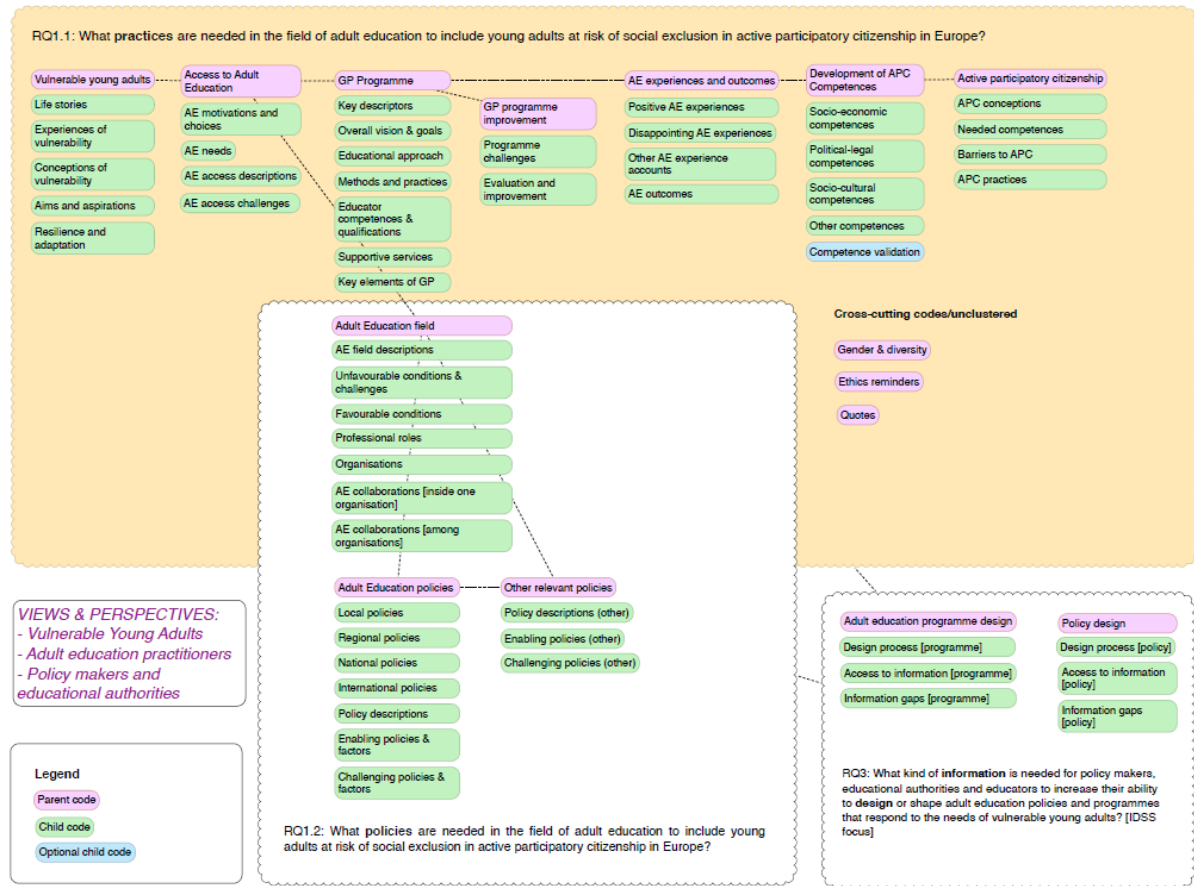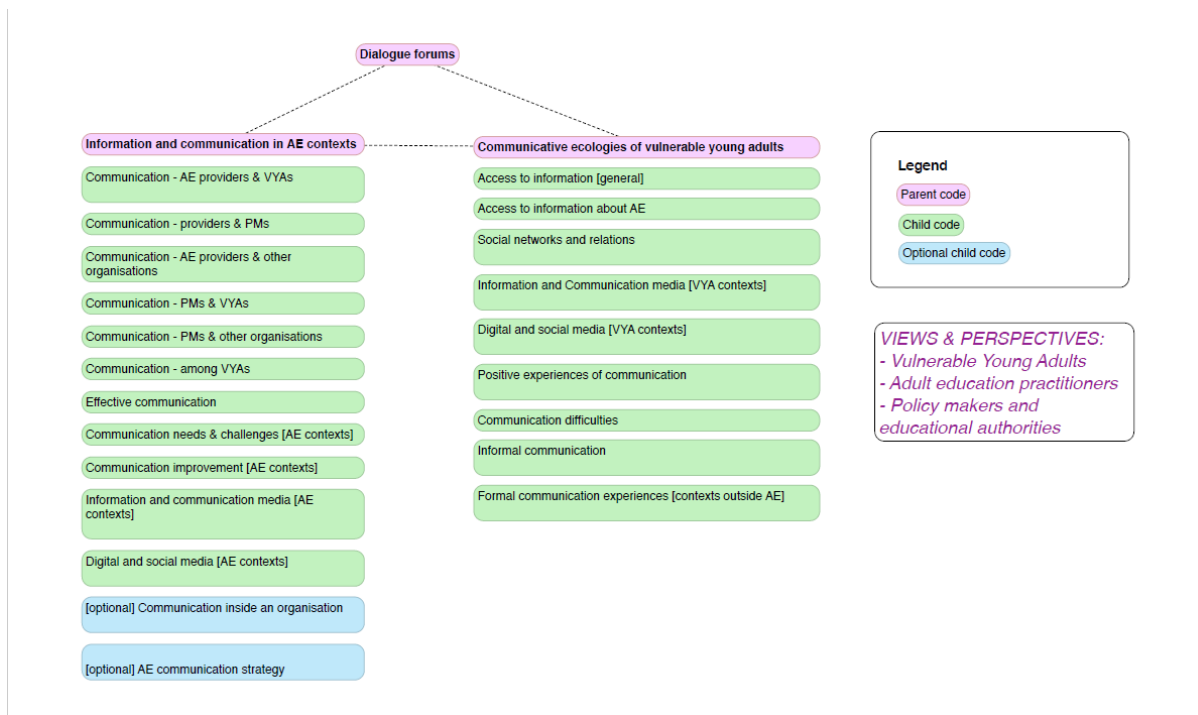

Figure 2. Visualisation of codes clusters in response to project research questions focused on WP3:

RQ1.1 [FOCUS AE PROGRAMMES]: What policies and practices are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

RQ1.2 [FOCUS AE POLICY]: What policies and practices are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

RQ3: What kind of information is needed for policy makers, educational authorities and educators to increase their ability to design/shape policies and programmes that respond to young people's needs?

Figure 3. Visualisation of codes clusters in response to project research questions focused on WP4:

RQ2: How can communication inside of and around Adult Education (AE) programmes be improved, in order to:
- o Reach out to and connect effectively with young adults at risk of social exclusion?
- o Enhance interaction and learners' engagement?
- o Enhance engagement and collaboration within the AE organisation and with relevant external agents?

3.2 Case codes

Case codes or nodes enable association of content and thematic codes to categories of respondents, according to variables that go from demographic data to features related to specific roles and activities they are involved in. All attributes or features of that respondent are added on the QDA in a unique classification sheet, and assigned as relevant to each respondent (each unique respondent thereafter represents a case code/node). In a sense, a case code can be thought of as a container where all data associated to a respondent is stored, whether it is coming from just one source (one interview) or several.

In EduMAP we used two kinds of classifications:
- ● For primary data – **_Respondents_**
- ● For all other documentation, reports, studies – **_Documentation_**

For each, we have defined attributes and values to ensure consistency in data treatment, categorisation and queries across the Consortium (Tables 1,2).

Table 1. Classification 1 - *Respondents*

Attribute	Value	Notes
Respondent type	AE practitioner Vulnerable young adult Policy-maker	This distinguishes main categories of respondents across multiple strands of research. For example: *AE practitioner* – includes team members of an AE programme studied as GP; but can also include AE practitioners/experts interviewed in Strand 1. *Policy-maker* – includes educational authorities; affiliated to all, any or no specific AE programme studied.
Gender	Male Female Mixed gender [focus group] Other	Gender can be assigned to all respondents; in queries it is likely gender will be useful mainly for distinguishing among male and female young people. *Mixed gender* can be assigned to focus groups where distinctions by gender could not be made *Other* - includes cases where gender is unknown, male/female distinction is not usable, such as genderfluid, transgender etc.
GP affiliation	CountryCode_GP1 CountryCode_GP2 …. CountryCode_GPx Not affiliated	Serves to assign respondents to a certain AE programme studied as good practice - GP (ex., RO_GP1; DE_GP3, etc).
Young people features		
Education level *completed*	0 Early childhood education 1 Primary education 2 Lower secondary education 3 Upper secondary education 4 Post-secondary non-tertiary education 5 Short-cycle tertiary education 6 Bachelor's or equivalent level 7 Master's or equivalent level 8 Doctoral or equivalent level 9 Not elsewhere classified 10 Unschooled 11 Missing	This is based on the ISCED categorisation for education level http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf With the addition of **(10) Unschooled** **(11) Missing**

Optional		
[optional] Current employment status	Not employed (studying) Not employed (not studying) Employed (studying) Employed (not studying) Other professional experience (volunteering, internship) Not known	*Only for young people respondents*
[optional] Age range		*Only for young people respondents* Each partner can test to what extent age range is relevant in a country context. For instance, these may be: • 16-17; 18-24; 25-30; above 30 • 16-19; 20-24; 25-30; above 30 • 16-24; 25-30; above 30

CLASSIFICATION 2 - *DOCUMENTATION*

This can be used for documentation such as reports, studies, web pages from AE organisations or which describe the AE field. Attributes from this second classification can be used just like the ones from *Respondents* classification - either in simple queries (using just attributes and values from this classification); or in conjunction with attributes from Classification 1 (such as in matrix queries in nVivo)

GP affiliation	CountryCode_GP1 CountryCode_GP2 … CountryCode_GPx Not affiliated	Serves to assign reports/studies/other documentation to a certain GP programme (ex., RO-GP1; DE-GP3, etc). Not affiliated – generic reports.
Geographical scope	International European Country-x Local [regional, city, neighbourhood level]	This refers to the geographical scope/coverage of the report/study

4. QUERIES

Queries enable data retrieval in a QDA, according to specific codes and respondent features, which facilitates a focused process of analysis. To work towards a consistent and valid data treatment and reporting across the Consortium, in EduMAP we have designed two sets of data analysis and reporting documents to be used by partners to report on findings for each of the three operationalised research questions:

- A template for reporting on findings from field research
- A document listing suggested queries to be run in a QDA to retrieve relevant data clusters for analysis.

While in this document we do not share the complete templates and query designs documents, below we offer a few examples of queries developed for one of the project research questions:

Example selected queries for RQ1.1 [FOCUS ON AE PROGRAMMES]

RQ1.1: What practices are needed in the field of adult education to include young adults at risk of social exclusion in active participatory citizenship in Europe?

To answer this question, we have developed suggested queries clustered around three main areas of analysis:
1. Context mapping and local definition of concepts
2. Good practice adult education programmes
3. Improvement and new directions in response to uncovered needs and wants

1. **Context mapping and local definition of concepts**

Operational question: *What are the main characteristics of the local AE context/field?*

Selected query questions:
How is AE defined and understood in the local context?
(if applicable) Are there any significant historical conditions or events that have shaped the AE field in a certain way?

> Code: AE field>AE field descriptions
> Cases: all [likely to be AE practitioners; policy-makers]
> Other sources: reports and studies that describe the local AE field; eventual web pages of organisations active within the AE field [from the latter, relevant text can be copy pasted in a document to be imported in nVivo]
> Approach: no actual comparison among perspectives is suggested, however attention to be paid to check the accuracy of views by looking jointly at responses from different sources (data triangulation) and other reports and separating between facts and opinions.

Selected query questions:
What organisations are active in the local AE field?
How do they collaborate with each other?

> Codes: AE field>Organisations; AE field>AE collaborations [among organisations]
> Cases: all/no distinction [retrieve all available data around codes]
> Other sources: reports; organisations' websites and organisational news pieces (ex., on common projects and collaborations for events)
> Approach: retrieve all data/no separation by case nodes is necessary. It is likely that much relevant data is coded at both suggested codes; a query with both codes can be run, or two sequential queries, as considered more useful in context. Data can be checked against reports and website news/pieces to ensure accuracy and fill the gaps.

2. **Good practice adult education programmes**

Operational question: *How is the GP programme characterised in terms of: student targets, key descriptors, vision and goals?*

Selected query questions:
How do the vision and goals of the GP programme relate to APC and vulnerability?

Are there specific provisions for accounting for <u>gender</u> and <u>diversity</u> in the programme vision?

Codes: GP programme>Overall vision and goals; Gender; Diversity
(optional/where relevant) APC>APC conceptions; Young people>Definitions and conceptions of vulnerability
Cases: AE practitioners distinguished through attribute GP affiliation>value: CountryCode_GPx
Approach:
- focus on describing the vision and goals of the programme, as concerns in particular the role of AE (and their AE approach) for addressing vulnerability and cultivating APC. The APC and vulnerability codes are useful to bring in the analysis when these complement/or relate to the GP programme's approach, as expressed in the GP's staff/AE practitioners.
- Gender and Diversity queries can be run separately to identify how they are accounted for at the level of the overall GP vision, or these aspects may be already mentioned in data coded at code GP programme>Overall vision and goals

Selected query questions: *What supportive services are offered in AE programmes and to what effect?*
Code: GP programme>Supportive services
Cases: AE practitioners; Young people; distinguished through attribute GP affiliation>value: CountryCode_GPx
Approach:
- ideally matrix queries to compare views of AE practitioners and learners; sequential queries if matrix queries are not possible
- during analysis, the focus is on understanding the need, reason why and benefit for offering supportive services, from the viewpoint of GP staff/AE practitioners and GP programme learners.

3. **Improvement and new directions in response to uncovered needs and wants**

Focus: Overcoming AE access challenges

Operational question: *What barriers to accessing AE should be considered and overcome to improve the design of future AE programmes and practices? How do these differ across respondent groups and in relation to young people features?*

Selected query questions:
What <u>challenges/barriers to accessing AE</u> are experienced by young people at risk of social exclusion? (How) do barriers differ in relation to context and diverse conditions of vulnerability?

Code: Access to AE>AE access challenges
Cases: AE practitioners; policy makers; young people [AE participants]; young people not accessing AE [not affiliated]
- Within young people respondent group – compare/look for differences and analyse these <u>where relevant:</u>
  - AE participants vs young people not attending an AE programme [not affiliated]
  - by gender
  - by educational level
  - by age/age range

        o   by employment status

Approach: the aim is to map barriers to accessing AE and identify factors of difference across the attributes above, but others can be tried by partners. The focus wherever possible is on the perspectives of young people.

Focus: Accounting for young people's needs, motivations for pursuing AE and aspirations

Operational question: *What AE needs, motivations to pursue AE, and life and professional aspirations cherished by young people are significant and should be taken into account in the design and improvement of AE programmes?*

Selected query questions:
What kind of <u>*AE needs*</u> *emerge for diverse young people at risk of social exclusion?*
How do AE needs differ in relation to context and diverse conditions of vulnerability? [where relevant]

     Code: Access to AE>AE needs
     Cases:

- AE practitioners; policy makers; young people [AE participants]; young people not accessing AE [not affiliated/strand 3]
- Within young people respondent group – compare/look for differences and analyse these <u>where relevant:</u>
    - AE participants vs young people not attending an AE programme [not affiliated]
    - by gender
    - by educational level
    - by age/age range
    - by employment status

Approach: the aim is to map AE needs and identify significant factors of difference in views across different respondent categories. Special emphasis is given to young people, to capture their views.

Selected query questions:
What <u>*motivates*</u> *young people at risk of social exclusion to take AE courses?*
How do motivations differ in relation to context and diverse conditions of vulnerability?

     Code: Access to AE>AE motivations and choices
     Cases: AE practitioners; policy makers; young people [AE participants]; young people not accessing AE [not affiliated/strand 3]

- Within young people respondent group – compare/look for differences and analyse these <u>where relevant:</u>
    - AE participants vs young people not attending an AE programme [not affiliated]
    - by gender
    - by educational level
    - by age/age range
    - by employment status

Approach: the aim is to map AE needs and identify significant factors of difference in views across different respondent categories. Special emphasis is given to young people, to capture their views.

Selected query questions:

What role do (life and <u>*professional) aims/plans/aspirations*</u> *play in relation to young people's access to AE and motivation to engage with AE?*
Does the role played by aspirations differ in relation to context and diverse conditions of vulnerability?

Code: Young people>Aims and aspirations
Cases: policy makers; AE practitioners; young people [AE participants]; young people not accessing AE [not affiliated/strand 3]

- Within young people respondent group – compare/look for differences and analyse these <u>where relevant:</u>
    o AE participants vs young people not attending an AE programme [not affiliated]
    o by gender
    o by educational level
    o by age/age range
    o by employment status

Approach: this is not focusing on the content of aspirations, rather the goal is to read through data to understand how aspirations are related to motivation to attend AE, and how we can use aspirations as leverages.