

Introduction to QCAmap

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Introduction

- With a series of slides we would like to show you the basic procedures of the software.
- The program entry page (www.qcmap.org)
- The Website with further infos (www.qualitative-content-analysis.aau.at)
- Informations about first steps to get started
- You need to register an account. We guarantee that all your data will be kept confidential. A registration notification will be sent to your email-address.
- Now you can use the software from everywhere using different webbrowsers (Internet Explorer 9, Mozilla Firefox, Google chrome).
- Do not forget to log out. Your data is stored on our server. We guarantee that only you have access to this data.
- Since the application is web-based you will always work with the latest version of the program.

The screenshot shows the QCMap website homepage. At the top right, there are links for 'Login' and 'Register'. The main heading is 'QCMap // a software for Qualitative Content Analysis'. Below this, a descriptive paragraph states: 'QCMap is an open access web application for systematic text analysis in scientific projects based on the techniques of qualitative content analysis. (Mayring, 2010, 2013)'. There are three buttons: 'Intro & Info', 'How to get started', and 'Login & start working'. Below the buttons, a paragraph explains that QCMap can be used in research projects in fields like Psychology, Sociology, Education, Economics, and Linguistic Sciences, to analyze text material from interviews, group discussions, observation protocols, documents, and open-ended questionnaire items. It defines Qualitative Content Analysis as a strictly rule-guided procedure containing qualitative steps (assignment of categories to text passages) and quantitative steps (analysis of category frequencies). A 'Literature' section lists two references: Mayring, Ph. (2010) 'Qualitative Inhaltsanalyse: Grundlagen und Techniken (11. Aufl.)' and Mayring, Ph. (2013) 'Qualitative Content Analysis - Theoretical Foundation and Basic Procedures (forthcoming soon)'. At the bottom, there is a copyright notice for Prof. Dr. Philipp Mayring and Dr. Thomas Henzl, and information about the development and funding of the application.

QCMap

QCMap // a software for Qualitative Content Analysis

QCMap is an open access web application for systematic text analysis in scientific projects based on the techniques of qualitative content analysis. (Mayring, 2010, 2013)

Intro & Info How to get started Login & start working

QCMap can be used within research projects in e.g. *Psychology, Sociology, Education, Economics, Linguistic Sciences*, **to analyze** small and large amounts of any **text material** coming from interviews, group discussions, observation protocols, documents, open-ended questionnaire items and others. **Qualitative Content Analysis is a strictly rule-guided procedure containing qualitative steps** (assignment of categories to text passages) **and quantitative steps** (analysis of category frequencies).

Literature

Mayring, Ph. (2010). Qualitative Inhaltsanalyse: Grundlagen und Techniken (11. Aufl.). Weinheim: Beltz
Mayring, Ph. (2013). Qualitative Content Analysis - Theoretical Foundation and Basic Procedures (forthcoming soon).

Qualitative Content Analysis Programm
© Prof. Dr. Philipp Mayring and Dr. Thomas Henzl
Alpen-Adria University Klagenfurt, Institute of Psychology and Center for Evaluation and Research Counselling (Zentrum für Evaluation und Forschungsberatung). Application developed by coUnity Software Development GmbH. Programm development funded by Research Council (Forschungsrat) of the Alpen-Adria University Klagenfurt and Institute for the Advancement of Science and Research (Institut zur Förderung von Wissenschaft und Forschung) of the Kärntner Sparkassen (Privatstiftung Kärntner Sparkassen).

Starting your work

- First you have to create a new project (title and description)
- Then you have to define a research question and description!
- Then you chose the content analytical technique (currently, inductive category formation and deductive category assignment are available)!
- You should give a description of the research question!
- By pressing „Create“ the program will save your research question and leads you to the next step, where you have to specify details for the chosen content analytical technique.

QCAnap

[Home](#) / [My Projects](#) / [Test](#) / [Add Research Question](#)

Add Research Question

Research question:

Content analytical technique:

Description:

Upload your text material

- For each research question you have to upload the text documents which will be analyzed!
- The text documents have to be transformed into a txt.-file (UNICODE-Format; the procedure how to convert your files is described on the entry page under the button „How to get startet“.

Home / My Projects / Example Teacher Unemployment

Edit Share Delete

Project details

Example Teacher Unemployment

This is an example analysis with parts from 4 interviews with unemployed teachers. The original material in German is found in Ph. Mayring: Qualitative Inhaltsanalyse. Weinheim: Beltz (11.edition 2010). The original study is Ulich, Hausser, Mayring et al. (1982).

We will demonstrate inductive and deductive procedures of Qualitative Content Analysis.

+ New Research Question

Research Questions

Description of stress factors in first praxis experiences as teacher (Inductive Category Formation)

First professional experiences, especially for teachers, are often described as "praxis shock" (Smagorisky et al. 2011; Mueller-Forbrodt, 1978). We want to describe the concrete stressing factors.

Start Coding Edit + New Inter-Coder-Agreement Analysis

Upload new Documents

Documents

#	Filename	
1	Case A.txt	
2	Case B.txt	
3	Case C.txt	
4	Case D.txt	

Inductive category formation

- You can look up the step model and the content analytical rules of inductive category formation (Mayring, 2011; 2013)
- If you have decided for inductive category formation, you have to describe the research aim, that is you have to define the content analytical units (recording unit in inductive CA is always the entire material), to give a category definition and to determine the level of abstraction!
- You can revise those definitions during the pilot phase (do not forget to save the changes with the button at the end of this page!).
- Only once these definitions are given, the program will allow you to „Start Coding“ your material!

QCAmap

Research question: Description of stress factors in first praxis experiences

Content analytical technique: Inductive Category Formation

[Step model & rules](#)

Description: First professional experiences, especially for teachers, are often described as "praxis shock" (Smagorisky et al. 2011; Mueller-Forbrodt, 1978). We want to describe the concrete stressing factors

Content analytical units

Coding unit: Clear semantic elements in the text

Context unit: The whole interview, interviewer protocol and background material

Recording unit: All documents

Count multiple codings

Category definition

Category definition: Stressful experiences in and around teaching, experiences of harm, loss or challenge which are not automaticalle coped (Lazarus)

Level of abstraction

Level of abstraction: Concrete stress factors for the person, connected with negative experiences, no general evaluations of the situation

Coding

- You can start coding. The program always shows you the research question and rules on the lefthand side, which also can be revised during the pilot phase of coding.
- Mark text passages with the cursor and formulate a new category or subsume the passage to a previously formulated and thus already existing category!
- The list of inductive categories will be growing.
- During the pilot phase you can also edit the category system.

You are in Coding mode!

Reserach Question

Description of stress factors in first praxis experiences as teacher

Content analytical technique

Inductive Category Formation

Category definition

Stressful experiences in and around teaching, experiences of harm, loss or challenge which are not automaticalle coped (Lazarus)

Level of abstraction

Concrete stress factors in the person, connected with negative experiences, no general evaluations of the situation

Content analytical units

Coding unit
Clear semantic elements in text

Context unit
The whole interview, interviewer protocol and background material

Recording unit
All Documents
Count multiple codings per document

[Edit category system](#)

Category System - Mozilla Firefox

www.qiapro.com/Popup/CategorySystem?projectId=208&questionId=19&categorySystemId=24ee473b7da2

Category System

- A1: Disappointments about students
- A2: Too much hours to teach
- A3: Only little time for education

And it so happened that at that time they were a bit short of teachers and the principal says to me: "Listen, I know what we'll do. You take the 8th and 9th grades in physics and mathematics, then I don't need to do that myself any more; that's extra work for me, you see and if you do it, I'll have more time for my administrative stuff."

I...when you can do more or less straight on if you're a science student, and to the students you're a magician anyway when you give them a demonstration with the circle of Thales. They say, "That's incredible, it's almost magic!" And that's what I enjoyed. that's why I was already looking forward to being able to teach at a seminary school. Certainly, there are **disappointments that the students are not as one thinks they ought to be. I mean, in a big city like this there are just a lot of problems, what with the big firm here. And it is certainly not as you really thought it was going to be** but well, it was certainly not a practice shock for me.

Q: Hm. Not even with the large number of teaching hours you have, with preparation - and, well a lot have told us this - that the postgraduate training phase is terribly stressful, with all the work.

I: Well, I... on that point you have to remember that in the first period, the first half-year in the training school and in the third period as well, you have to remember that as a rule you only have one class per subject. So as a rule that means between 4 and 8 hours. O.K., someone with English or French might have ten hours - 5 hours English, 5 hours French in one class. But that's not a problem. So that's not a problem.

A1

Disappointments about students

[löschen](#)

Deductive category assignment

- If you chose the technique of deductive category for your research question, you have (after defining the content analytical rules) to formulate the coding guideline, which contains definitions, anchor examples and coding rules.
- After coding a certain amount of material the program reminds you to revise the category system and the coding guideline (pilot phase). After finishing the pilot phase, no more changes can be applied to the coding guideline.

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[Home](#) / [My Projects](#) / [Example Teacher Unemployment](#) / Add Research Question

Edit Research Question

Research question

Content analytical technique [Step model & rules](#)

Description

Content analytical units

Research question is already revised.
Modification of content analytical units and the coding guideline is disabled.

Coding unit

Context unit

Recording unit 1 document

Allow multiple categorization

Count multiple codings

Coding Guideline

Name	Definition	Anchor Examples	Coding Rules
■ C1: High self confidence	High subjective feeling of having met the challenge	Of course there were little problems now and then, but they were simply solved: owing to a change	All three aspects of the definition must point in the direction of "high", at least no

Coding

- During coding the texts you can always have a look on the coding guideline.
- Mark text passages with your cursor and assign them to one of the categories in your coding guideline!

QCAmap Back to the project

You are in Coding mode!

Research Question

Has "practice shock" affected the self-confidence of the individual?

Content analytical technique

Selective Category Assignment

Content analytical units

Coding unit
Clear semantic elements in the text

Context unit
The whole interview, interviewer protocol and background material

Recording unit
1 Document

[View coding guideline](#)

Coding Guideline

Name	Definition	Anchor Examples	Coding
C1: High self confidence	High subjective feeling of having met the challenge well, i.e. - good awareness of the kind of challenge and the way it should be coped with; - positive, optimistic feeling when dealing with the challenge - conviction that mastery of the challenge lay in one's own hand	Of course there were little problems now and then, but they were simply solved: owing to a change either in my view or in that of the pupil, depending on who was at fault - we all make mistakes.	All three directions: diagnostic, diagnostic, diagnostic
C2: middle self confidence	Only partial or fluctuating certainty of having coped with the challenge	I managed to grope my way through (1) K., but it was often a cliffhanger: "With time it got a bit better, but whether that had to do with me or with other circumstances I don't know" "Towards the end I got on quite well with the seminary instructor but I didn't have a very good feeling about it - I just accommodated myself, submitted to the demands.	It not a self confidence
C3: low	Conviction of having coped	That hit my self-confidence hard, I thought of myself as a nobody, a	All three

and I had a marvellous time. Senior elementary school is of course relatively simple as far as preparation is concerned, as the content is not so difficult. In 9th grade maths there's Pythagoras, well...

Q: We know!

I: ...which you can do more or less straight off if you're a science student, and to the students you're a magician anyway when you give them a demonstration with the circle of Thales. They say, "That's incredible, it's almost magic!" And that's what I enjoyed, that's why I was already looking forward to being able to teach at a seminary school. Certainly, there are disappointments that the students are not as one thinks they

C1 X

High self-confidence

delete

- You can run several research questions (inductive and deductive) within the same project, with the same text material.
- When your analysis of the texts is advanced, the software remembers you to pilot check the category systems (inductive) or the coding guideline (deductive) and the content analytical rules.
- Once coding of the text material is finished (but also during coding) the system gives you several possibilities of displaying the results (button „Analysis“).
- The results will be given as Excel-files, so the data can be imported into statistical analysis software (e.g. SPSS).

The screenshot displays the QCAmap web interface. At the top, the user is logged in as 'PMayring'. The breadcrumb trail shows 'Home / My Projects / Example Teacher Unemployment'. The main heading is 'Project details', with 'Edit', 'Share', and 'Delete' buttons. Below this is the project title 'Example Teacher Unemployment' and a description: 'This is an example analysis with parts from 4 interviews with unemployed teachers. The original material in German is found in Ph. Mayring: Qualitative Inhaltsanalyse. Weinheim: Beltz (11. edition 2010). The original study is Ulich, Hausser, Mayring et al. (1982). We will demonstrate inductive and deductive procedures of Qualitative Content Analysis.' A '+ New Research Question' button is visible. The 'Research Questions' section contains two entries. The first is 'Description of stress factors in first praxis experiences (Inductive Category Formation)'. Its description reads: 'First professional experiences, especially for teachers, are often described as "praxis shock" (Smagoritsky et al. 2011; Mueller-Forbrodtt, 1978). We want to describe the concrete stressing factors.' It has buttons for 'Start Coding', 'Edit', '+ New Inter-Coder Agreement', and 'Analysis'. The second entry is 'Has "practice shock" affected the self-confidence of the individual? (Deductive Category Assignment)'. Its description reads: 'The question is, what means the first practice experiences for the person himself. Does he or she grows or looses self-confidence? The interview material on practice schock has to be rated in respect to the degree of self-esteem as consequence of first practice experiences.' It also has buttons for 'Start Coding', 'Edit', '+ New Inter-Coder Agreement', and 'Analysis'. Blue arrows from the text on the left point to the 'Analysis' buttons of both research questions.

- Enjoy the program!
- New features will follow soon.
- If you have questions or problems, or if you find any features that do not work properly, do not hesitate to contact us. Your feedback is very much appreciated!

QCAmap PMayring ▾

[Home](#) / [My Projects](#) / Example Teacher Unemployment

[Edit](#) [Share](#) [Delete](#)

Project details

Example Teacher Unemployment

This is an example analysis with parts from 4 interviews with unemployed teachers. The original material in German is found in Ph. Mayring: Qualitative Inhaltsanalyse. Weinheim: Beltz (11. edition 2010). The original study is Ulrich, Haussler, Mayring et al. (1992).

We will demonstrate inductive and deductive procedures of Qualitative Content Analysis.

[+ New Research Question](#)

Research Questions

Description of stress factors in first praxis experiences (inductive Category Formation)

First professional experiences, especially for teachers, are often described as "praxis shock" (Smagoritsky et al. 2011; Mueller-Forbrodtt, 1978). We want to describe the concrete stressing factors.

[Start Coding](#) [Edit](#) [+ New Inter-Coder Agreement](#) [Analysis](#) [Delete](#)

Has "practice shock" affected the self-confidence of the individual? (Deductive Category Assignment)

The question is, what means the first practice experiences for the person himself. Does he or she grows or loses self-confidence? The interview material on practice shock has to be rated in respect to the degree of self-esteem as consequence of first practice experiences.

[Start Coding](#) [Edit](#) [+ New Inter-Coder Agreement](#) [Analysis](#) [Delete](#)

[Upload new Documents](#)

Documents

Filansma

[support & feedback](#)