

Content Analysis: Measuring the Success of Journalism Capacity Building

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Many media development organizations try to improve the content produced by journalists. They do this, for example, using newsroom consultancy, training, mentoring and other approaches. But it is difficult to judge whether the quality of the products put together by the journalists in question truly has improved through intervention. In this paper we describe how quality in reporting could be measured through content analysis. We show that this approach, although somewhat technical, is feasible. It can help projects to become better and more successful. As a suggestion for practitioners in media development we present three options for measuring quality of reporting for monitoring and evaluation purposes.

Every media development expert is familiar with this problem: A newsroom consultancy went well; the most important ideas and concepts seem to have been grasped by the participants. They even had fun together, and there was a general air of enthusiasm. But at the end of the consultancy doubts remain. Will the project have changed anything in the working life of the journalists? What will they be able to apply when they return to their routines, faced with all the limitations and difficulties of their newsroom? Will their reporting really be any better a month or so after the intervention?

This problem is shared by many organisations that support media worldwide, and use journalism capacity building as a central element. Media development has become a standard in development cooperation since the 1990s with the emphasis on supporting human rights and good governance. These efforts have led to countless journalism training courses being held over the last two decades, a trend which shows no sign of slowing.

But despite mounting pressure from donor agencies, hard evidence for the success of journalism capacity building within media development is still limited. Evaluations are

conducted but often do not cover the most relevant issues. It is hardly ever attempted to measure the quality in reporting by simply assessing the very content of journalistic products. And yet there can be no doubt that the quality of reporting needs to be improved if media development programmes want to do any good.

Assessing the quality of content directly can be useful for various purposes. First, we can clearly identify which parts in an individual journalistic article/audio/video piece are good and which parts are not good – and thus identify what needs to be worked on. Second, by analyzing numerous journalistic pieces with the same method, we get results on a more general or aggregated level, e.g., we can see whether a given group of course participants is better than another group, and in what respect. Thirdly, by combining results from content analysis with data from other areas we can learn more about a particular project, e.g., what part worked well and why, and what can be improved in the future.

In the following we discuss how quality in journalism can be defined, followed by a practice-oriented description of content analysis as a method. Finally we suggest three practical options for measuring quality.

Quality in Journalism

Quality was seen for a long time as not objectively measurable. Some people still share this view today, as it is believed that everyone has a different understanding of what constitutes “quality” and thus applies highly subjective judgments to gauge the level of quality. So, the measurement would depend mainly on who is measuring and therefore be unreliable.

That viewpoint has at least partly changed over the past 20 years: A media scholar, having stated initially that measuring quality looks as difficult as “nailing a pudding to the wall” (Russ-Mohl 1992), later came to the conclusion that quality is measurable, if one adds some special form of “glue” to the pudding – i.e., if one puts sufficient energy into refining the measurements (Held and Russ-Mohl 2005). Consequently, the new approach refrains from talking about “quality of reporting” as such, and subdivides “quality” into a set of criteria that define various aspects of quality. And most of those criteria, not all but many of them, have the advantage of being measurable by content analysis.

Quality Debate and Elaboration on Quality Criteria

Quality criteria for journalism can be derived from various media theories (see box 1) as well as from journalism practice, for instance the rule that a variety of sources are needed. Although quality criteria are established on various levels – from criteria regarding the structure of media, the professionalism in texts or the presentation to the audience – it is remarkable to see that different approaches (e.g., systems theory or democracy theory) often define similar quality criteria for journalistic work (see Arnold 2008).

The main quality criteria for texts as compiled by these theoretical approaches are summarized in box 1: They are in general agreement with those mentioned by practitioners when asked what constitutes quality of reporting (Russ-Mohl 2005: 374).

Basic Quality and Specific Quality

In various projects it has proven useful to distinguish between the “basic” essential requirements for almost all journalistic products, and “specific” requirements for special kinds of journalism or specific newsrooms or contexts. We call requirements for journalism which are valid even in different cultures across the globe “basic quality” criteria. These consist of elementary things every good reporter offers with his/her stories, e.g., “diversity of sources,” “diversity and balance of different viewpoints,” or “reporting background beyond events.”

The second set of quality criteria is more “specific”, because they depend on the focus of the kind of journalism and training: Health journalism will require a different set of

criteria to, say, reporting on climate change, ethnic conflict or transformative justice. Interview training will be different for narrative writing courses, or the consultancy of a newsroom in a radio station. These “specific quality criteria” are, for example, whether medical research is presented sufficiently broadly and correctly in health stories; whether news reports on politics are in accordance with the ethical code, especially with regard to the right of reply; whether broadcasts separate reported facts clearly from the reporting journalist’s own opinion; but also whether sound bites are properly audible and technically correct.

Thus, basic quality is more or less given, whereas the specific quality criteria need to be defined in every media development programme by its implementers and their partners, contingent upon focus and intentions. Ideally, the audience’s expectations and needs are also taken into consideration in this process. This important perspective can be assessed at the onset of a programme and then be integrated into the planning process. For example, if one attempts to improve the regional news reporting of a particular radio station it can be very helpful to hear from the audience, e.g., through focus groups, before then agreeing with the journalists on the specific aspects in their reporting that need to be improved. Overall, for each intervention and its assessment scheme it needs to be carefully considered how important basic and specific quality criteria are and how they are weighted in relation to one another. In many developmental contexts the basic craft of journalism may be key, while in other cases very specific elements relevant to a specialized form of journalism may be more in focus.

Method

Content analysis is in a way a very tedious method. It requires a strict sequence of steps to be taken by a research team (see box 2). Basically, a sample of journalistic products (print, audio and video) needs to be identified and then analysed in detail, sentence by sentence. The entire process is channelled by a catalogue of specific questions towards every product in the sample. This so-called codebook contains the questions, the different answer options to every question and the respective codes (usually numbers, sometimes sentences). The codes are entered into a data file and later assessed by statistical analysis.

For example: a codebook may contain the question, how many sources are identifiable in the story. Then the coder has to count all sources (each source counts only once, even if used several times). If the result is three sources then the number “3” is filled into the data file for that specific question. So each text needs to be read and each radio piece listened to several times in order to assess all the different quality criteria in question.

Quality in Journalism and Quality Criteria

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The debate on quality in media and journalism has always been contentious partly because defining quality involves normative decisions, influenced by societal discourse and individual values (Beck et al. 2010). Also “media quality” is multi-dimensional: It refers to different factors influencing media content (“hierarchy of influences” model by Shoemaker & Reese 1996), such as organisation, editorial hierarchy and routines, capacity within journalism, media laws and socio-cultural influences. As far as journalistic reporting is concerned, it is obvious that quality here is contingent upon the medium, genre, target groups, publication rhythm, and other factors.

One approach introduced by German scholars was to deconstruct the general notion of quality into quality criteria. Schatz & Schulz (1992) first suggested five criteria for TV quality: diversity, relevance, professionalism, acceptance, and rule of law. All of these can be further sub-divided into even smaller criteria. Rager (1994) then established diversity not as a quality criterion, but as an overarching goal of journalism, and professionalism and rule of law as pre-conditions. He then uses timeliness, relevance, correctness, and audience-oriented presentation as his four-core quality criteria for journalism. Russ-Mohl (2005) suggested timeliness, objectivity, transparency, originality, and complexity reduction. Arnold (2008) elaborated which quality criteria can be derived from the systems theory, normative democracy values, and the audience perspective. Despite conceptual differences in approach, these various quality criteria for journalism are often overlapping, with diversity at the centre (Spurk et al. 2010).

The main quality criteria compiled by melding these different approaches are the following:

- Diversity (of actors, sources)
- Timeliness
- Relevance
- Credibility
- Correctness and Truthfulness (reporting on proven facts)
- Comprehensiveness
- Independence
- Critique
- Impartiality
- Balance (Separation of opposing sources and perspectives)

In contrast, the discussion in the UK and the US centres on notions like objectivity, balance, fairness, and cynicism (Hampton 2008), and less on those quality criteria mentioned above. However, empirical studies work with the same criteria, e.g., diversity of sources and diversity of topics (for example, the US Pew Research Center’s Project on Excellence in Journalism, with its annual “State of the News Media” report, see <http://stateofthemedias.org>).

It is obvious that not all these criteria can be seen in manuscripts, e.g. independence is rather a pre-condition for high quality than a characteristic of texts; credibility is rather a result of good quality, whereas correctness can be checked in the text itself. Therefore, the criteria are only partly used in content analysis. Also the criteria are not fully distinct, but partly overlapping: Balance is partly covered by diversity of sources; comprehensiveness is connected with diversity of topics and arguments. And some of the criteria need further explanation or specifications: for example, diversity can be easily exaggerated when seen in a “the more the better” style: A report covering more than ten viewpoints or sub-topics would certainly be assessed as confusing and lacking in focus both by readers and editors.

For a meaningful evaluation the procedure of content analysis needs to be conducted at least twice: Once at the onset of a programme – as a baseline study, and then at the end of the project. Ideal are additional measurements in the middle of the project and some time after its termination. Measurements in the middle of the project provide those involved with information early on in the project. They can react to challenges the project may face and also use the data to represent the project and to write the next proposal. Likewise measurements some time after the project’s termination are very useful: They show the long term effect of

the intervention and thus provide a project team with additional information on the sustainability of their approach. In any case the method requires a large training effort for staff assessing the stories. These coders are usually students or graduates (not project staff) knowledgeable of the country and media context, and they should be trained in using the codebook for up to a week. This initial investment is mandatory if one wants to achieve a reliable level of concurrence amongst coders about the correct assessment of journalistic products and a common understanding of the meaning of answer options.

Method of Content Analysis – How Does It Work?

Content analysis is a scientific method for systematically assessing various aspects of texts. In order to apply it as a measure of quality in reporting, a number of steps need to be taken: First the relevant quality categories need to be selected and defined for the specific project in question. In general, the criteria are further subdivided into various aspects, for example in the category “diversity of sources” a distinction is made between the “number of sources”, and the “societal group the source belongs to”. These (sub)criteria are elaborated into questions on the texts which then need to be answered by the “coders” who analyse the text. The questions should be “easy” to answer in order to ensure that different people give the same answers to them. All the questions (called “variables” in technical terms) are compiled

into a “codebook” that contains definitions and instructions for the coders. Answering the questions then means entering a code into a data file, i.e., the number identifying clearly the specific answer option chosen. In order to enable the coders to work correctly they need to be offered specific training based on the actual codebook.

The data they produce forms the basis for statistical analysis. The results then offer information on the performance in the different qualities measured. And they can be further used to identify correlations between text quality and other factors. It can be concluded, for example, what type of training delivers better results in quality.

Advantages of Content Analysis

The method can be highly useful for journalism capacity building programmes for several reasons:

- *It is direct: The quality of each story is directly assessed with criteria that have been elaborated jointly with project managers and journalists.*
- *It reflects the user’s perspective: The assessment follows the route of the media user, i.e., as perceived by the audience (through the readers’, listeners’ or viewers’ lens).*
- *It is systematic: A systematic comparison between stories is possible because all journalistic products are assessed with the same criteria.*
- *It is flexible: New areas of interest can be integrated, for example, assessing elements of conflict sensitive journalism.*
- *It is driven by internal decisions: Content analysis requires cooperation between researchers, project managers and trainees/journalists. Many decisions in content analysis need the input of internal project staff or journalists. They have, for example, the final say on what the relevant quality criteria are. They also need to decide what level of performance is finally rated as “good”, “fair” or “below standard”, as the pure statistical analysis only delivers data on the performance as such, i.e., “30% of stories have more than 3 sources”, but not how that is evaluated. Thus, the entire process is owned by the project and its local partners, although external staff will conduct the final assessment.*

Disadvantages

- *Not everything can be assessed: Content analysis can only assess quality criteria that are observable in journalistic products. Issues regarding the journalistic process of research and writing, therefore, cannot be evaluated by*

content analysis and must be left to other methods. The same is valid for pre-conditions for media development such as independence of editorial decisions from outside interference or credibility of media outlets. These need to be ascertained by other means, e.g., surveys with media owners or expert evaluation.

- *It is a time consuming effort: Content analysis requires time and resources.*

In the following we suggest three options in order to show that the method can be adapted to the size and the resources of a project.

Three Options for Integrating Content Analysis into a Media Development Project

There are three main options for applying content analysis when assessing quality.

Option 1: Simple Check – Low Budget

This version of content analysis is very basic. It offers a simple check of what has been achieved by training. It builds on practice used, for example, in qualifying journalists’ reports for awards. A small selection of articles is assessed, according to a simplified list of questions. Assessment questions should be only the most relevant ones, and are usually quite general. The number of stories to be assessed is rather small (which limits drawing generalizable conclusions) and the assessment is often done by journalists, mentors or trainers, not external researchers. The approach uses a list of questions such as shown below in box 5 (assessment matrix) and a maximum number of points is set for every

question. At the end the points are added up to get the final mark for every article. Nevertheless it is of the utmost importance to provide the assessors with training on the assessment procedures, understanding of questions, meaning of different judgements, and attribution of points. This alone makes the varying assessments by different assessors comparable. Otherwise this approach becomes arbitrary. This version delivers useful insights into how the programme works with regard to quality improvement, although less than compared to the other options 2 and 3 (see below). Nevertheless, conducting this simple check is much better than doing no analysis at all and relying completely on guess work about achievements.

Option 2: Serious and Sustainable Assessment – Medium Budget Version

This medium version is a sound assessment of journalistic texts, guided by scientific standards, mostly done by external researchers in close cooperation with project staff. Here the systematic and structured approach based on a codebook is applied. The version consists of content analysis only, no additional data is used.

This option is more costly as coders need to be intensively trained in order to achieve coherence amongst them. Once the initial investment in elaborating the codebook, training and developing capacity in statistical analysis is done, it can be used more often and becomes more economic over time. Selected coders should have a good capacity in structured analysis according to given criteria.

It is important to know that the analysis delivers a very detailed picture of the performance levels in various quality criteria on individual as well as on aggregated levels. If evaluators and project managers wish to generate an “overall rating” of those stories, a transformation from raw data into marks (e.g., “good”, “fair”, and “low”) needs to be done. This transformation requires judgement from project staff and should be jointly done by external researchers and internal project managers.

In sum, option 2 delivers a wealth of useful insights about the achievements in improving quality, but can hardly make suggestions about the reasons for the performance levels achieved.

Option 3: Scientific Exercise with Complementary Evaluation – High Budget Version

This high budget version consists of a scientific content analysis (as in option 2) and an additional effort in gathering complementary data. This data can inform the media development programme about potential factors that influence the performance levels measured through content analysis. So here other research methods are applied in addition to content analysis. The aim is to gather new information and

learn about other factors that may have influenced the result found with the content analysis. For example, the project could choose to inquire about the intensity of the mentoring process or the organizational set-up in the newsrooms where journalists are working (number of special desks, special editors, hierarchy), the professional network they are working in, the economic situation of reporters (salaries, honorarium, allowances), or even the political environment media houses are operating in.

Combining content analysis and other data from surveys offers the opportunity to compute the correlations between performance level and influencing factors. It could be used to identify reasons for having recorded success or failure in various training programmes.

Audience research is another key element which could be added at the outset when defining the quality criteria for a particular project. By assessing special expectations and needs of the people addressed by a particular medium or form of journalism, additional quality criteria can be identified or the weight of chosen criteria could be adapted. Furthermore, assessments of the audience itself could be gathered and correlated with content analysis data.

Overall this broad analysis does not only show different performance levels in quality, but also show what factors have partially contributed to the achievements and it can be oriented towards specific audiences.

Conclusion

Content analysis in media development has in recent years progressed successfully through its first pilot phases. The approach was built on methods established in journalism research and applied to the specific needs of project evaluation. Overall the results have proven to be consistent and useful. They have helped project teams to learn and advance. And yet it should be admitted that content analysis does not answer all questions, and it involves considerable effort. The collection of material, the coding, as well as the discussion of the method with all those involved take time. But this additional effort is certainly worth it. It creates new insights in media development. And it can tell a trainer if the participants have become better journalists.

Exploiting the full potential of content analysis in evaluating capacity building efforts will yield many more insights in the future. They can be used to identify shortcomings in different training approaches, different groups of participants or media houses. It will be possible to identify cases of success and to say exactly why a certain approach worked out well. These new insights can then be applied for an improved project steering and thus towards more focused approaches in media development overall.

Three Cases: Strengthening Quality Journalism Through Content Analysis

03

In 2010, **Internews in Kenya** used a simple questionnaire in its health journalism programme. It helped experienced editors and trainers assess articles written by trainees who had undergone a training programme. Later, a comparison was made to evaluate how much progress the trainees had made over time. It turned out that progress was significant, but relatively small. The findings helped to identify shortcomings in the performance of journalists. Trainees, for example, had good performance in structure, but performed less well in “accuracy and balance.” Subsequently, the recommendation was to address this through greater focus on accuracy and balance during mentoring and formal training activities.

The **Tanzania Media Fund (TMF)** supports public and investigative journalism with various types of grants for journalists and media houses. In 2012 and 2013 a full content analysis was done, comparing articles and radio pieces of various TMF grantees, amongst various grant types, and with a control group of non-TMF articles randomly drawn from the general Tanzanian media. It could be shown that TMF grantees were much better than the control group with respect to most quality criteria and that TMF grantees who had received more mentoring were performing better than those with less mentoring. However, it

was also shown that grantees had not made any progress with respect to other quality criteria like “transparency of sources” and “elements of investigative reporting”. The mentoring was then adjusted accordingly.

Between 2010 and 2012 the **science journalism cooperation project SjCOOP** supported over 70 young science journalists in Africa and the Arab world with intense mentoring by experienced science journalists. An evaluation study systematically compared the articles written by participants before project start and at the end of the project. It was found that there was substantial progress by roughly one third of the participants; the rest were stable or even showed a decline in quality over time. As the project had gathered additional data about the mentoring process, role models and the newsroom structures, it could be shown that progress was significantly better for a certain subgroup of the participants who had received a specific form of mentoring: Whenever the mentors had worked systematically on manuscripts and their quality before they were published (instead of, e.g., just discussing story ideas, already published manuscripts, and career planning) the participants’ articles advanced significantly in the long term.

How Coding Is Done in Content Analysis

04

In the preparation for a training project with several journalists from radio stations in Zambia, an assessment was made in 2006 of four radio news programmes with a total of 196 news items. Here we present a single transcript from a Radio Phoenix Zambia news bulletin and how it is processed in content analysis [the coder’s identification work is documented in brackets]

“The **committee of citizens** [=Actor 1] has urged the electorate to vote for leaders of quality and subsistence in the forthcoming **general elections** [= identification of topic = elections] if they are to derive the benefits of having elections.

Committee of citizen’s **executive director, Gregory Chifire** [= identification of source 1, source belongs to civil society organ-

isations], told radio **Phoenix in an interview** [source context: interview by radio] that his organisation believes that underdevelopment in Zambia has been due to poor representation in decision making positions...

Quote Gregory Chifire [= source quoted as soundbite]

“... economic emancipation does not lie in recycling leadership but lies in good policies. So far our economy is performing extremely well and what we need is continuity...Therefore, we are appealing to all political parties to base their **campaigns on issues and not personalities**. Zambians are tired of ... same empty promises...” [identification of pre-defined argument, here: issues instead of personalities]”

Example of an Assessment Matrix

Main Criteria	Subcriteria	Maximum Points	Actual Rating in Points
Topic	<p>Does the text explore topics of development issues? For example: does the article explore innovative processes of people making demands towards local or national authorities? No > 0 points Yes, little to medium > 5 points Yes, to a large extent > 10 points</p>	10	
Sources I	<p>Number of sources Does the text use a good number of sources? 0 and 1 source > 0 points 2–3 sources > 5 points 4 and more sources > 10 points</p>	10	
Sources II	<p>Diversity of sources Does the text cite a combination of ordinary people and professional sources? No > 0 points Yes > 5 points</p>	10	
Background	<p>Does the text explore structural causes of poverty? No > 0 points Yes, Little > 3 points Yes, Medium > 6 points Yes, Fully > 10 points</p>	10	
Balance	<p>Does the text show different viewpoints and does it compare them? No > 0 points Yes > 5 points</p>	10	
Technical aspects			
Radio	<ul style="list-style-type: none"> - soundbites technically correct - speaker with clear voice 	10	
TV	<ul style="list-style-type: none"> - picture and text in sync - cut technically correct 	10	
Print	<ul style="list-style-type: none"> - Link headline, lead and text clear - typos? 	10	
Maximum Points		80	

This extract was taken from a journalism workshop on development and human rights issues but adapted for better clarity on the principles for an assessment matrix.

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