

Characteristics of university websites (Science Communication)

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KEYWORDS

universities, university communication, online communication, strategic communication, websites, social media, science communication

BRIEF DESCRIPTION

A topic-independent systematic approach according to Deuze (2003) enables to describe websites of universities based on three main characteristics: Hypertextuality, multimediality and interactivity (Metag & Schäfer, 2017). Other important dimensions to characterize a website are multilingualism (e. g. Chapleo et al., 2011) as well as the content of those websites (e. g. Bozyigit & Akkan, 2014), but also their dialogical dimension (e. g. McAllister-Spooner & Kent, 2009) and the prevalence of ethnic and gender diversity (Bal & Sharik, 2019).

THEORETICAL FOUNDATION

According to Deuze (2003), whose systematic approach was applied in the content analysis of Metag and Schäfer (2017), three basic characteristics of online communication can be distinguished:

1. Hypertextuality can be understood as the linking of individual pages on the internet, whereby a differentiation is made between internal (links lead to one's own website) and external hypertextuality (links lead to other websites).
2. Multimediality means offering information in various formats (e.g. text, or audio and video formats).
3. The term interactivity encompasses different

ways for users to disseminate or access information (Kopper, Kolthoff, & Czepek, 2000), but also different options for producers and users to interact with each other (e.g. giving feedback).

REFERENCES/COMBINATION WITH OTHER METHODS OF DATA COLLECTION

In some studies, such as those by Chapleo et al. (2011) or Metag and Schäfer (2017), cluster analyses were carried out following the content analyses. The study by Bal and Sharik (2019) also incorporated enrollment data from the universities in order to compare it with the results of the content analysis and to examine whether the website portrays the actual diversity of students at the university. In other cases, combinations of quantitative and qualitative techniques were applied (Lederbogen & Trebbe, 2003) or a critical discourse analysis (Zhang & O'Halloran, 2013) was conducted.

EXAMPLE STUDIES

Bal & Sharik (2019); Bozyigit & Akkan (2014); Chapleo et al. (2011); Else & Crookes (2015); Gordon & Berhow (2009); Lederbogen & Trebbe (2003); McAllister-Spooner & Kent (2009); Metag & Schäfer (2017); Shadinger (2013); Zhang & O'Halloran (2013)

INFORMATION ON METAG & SCHÄFER, 2017

Authors: Julia Metag & Mike S. Schäfer

Research questions: RQ1: What is the content of the online communication of German, Austrian and Swiss universities? RQ2: Is it possible to distinguish different types of universities in terms of their communication methods? RQ3: Which structural features are constituting the identified types?



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Object of analysis: Websites, Facebook and Twitter accounts of all universities which are entitled to award doctorates in Germany (N = 146), Austria (N = 33) and German-speaking Switzerland (N = 11)

Unit of analysis I: Website, Facebook and Twitter presence as a whole

Unit of analysis II: The three largest posts on the website, the first five Facebook posts and the first five tweets of the research week

Timeframe of analysis: 19.-25.05.2014 (Switzerland) & 02.-08.06.2014 (Germany and Austria)

INFORMATION ABOUT VARIABLES

Variable name/definition: Formal categories: Structure of the website

Level of analysis: Website

Values:

- Language: German, English, other
- Ressort structure: Information about studying; information about the university
- Clearly visible navigation point for public/press/media
- Number of employees in the press office
- **Multimediality:** Number of pictures in general & referring to science; number of video files; number of graphics in general & referring to science; number of audio files
- **Hypertextuality and Interactivity:** Integration of the Twitter feed or Twitter icon on the home page; integration of the Facebook icon on the home page; integration of other social media icons on the homepage; embedded app for campus life on the homepage

Scale of measurement: Nominal, except for number of employees and Multimediality (metric)

Reliability: intercoder reliability according to Holsti: 0,90 (in total; no variable below 0,71)

Codebook: in the appendix (in German)

Variable name/definition: Content variables for articles on the website

Level of analysis: Article on the website

Values:

- Type of article: Presentation of scientific results, scientific interview with a scientist, scientific news article, event information with scientific relevance, article/interview without scientific reference, event information without scientific reference
- Author
- **Multimediality:** number of pictures; number

of graphics; number of audio files; number of video files

- Topic of the article
- Addressee of the article
- Number of speakers in the article
- Different speakers in the article
- Address (direct/indirect/unclear & form of address)
- Language (scientific/formal/everyday language)
- **Hypertextuality and Interactivity:** Possibility to link on LinkedIn/blogs; links to other websites/further information; possibility to rate/like/share the article; possibility to give feedback/to comment; number of comments; reactions of university towards e.g. comments; number of comments from university; response time to comments from other users

Scale of measurement: Nominal, except for Multimediality, number of speakers in the article, number of comments (from university), response time (metric)

Reliability: intercoder reliability according to Holsti: 0,90 (in total; no variable below 0,71)

Codebook: in the appendix (in German)

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