Professional masters in the communication field: Notes on project design and evaluation criteria

Mestrados profissionais na área da comunicação: Notas sobre o design de projetos e critérios para avaliação
Maestros profesionales en el área de comunicación: Notas sobre el diseño del proyecto y los criterios de evaluación

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ABSTRACT:
We describe a set of guidelines for design and evaluation of projects, developed for professional master’s degrees, based on the experience of the case of the Federal University of Maranhão program, the first of its kind in the Brazilian Amazon region. Starting from the specifications of the CAPES area document for Communication and Information and the concepts of Design Science, the work also reflects the ten years of experience of LABCOM - Media Convergence Laboratory in the area of applied research, with an interdisciplinary approach and creation of software solutions to support the work of researchers.

KEYWORDS: Amazon; CAPES; Communication; Evaluation.

Introduction
We recently started our professional master’s degree program in Communication at the Federal University of Maranhão – UFMA. Being the first of its type in the Brazilian Amazon region, we project our work with a mixture of great expectations and great responsibilities.

It has been a constant learning process where teachers and students of the first class have been working hard to build something consistent from the two research lines that we created: a) Institutional and Marketing Communication; b) Journalism, Convergence and Innovation.

Among the more common questions, doubts related to the idea of creating a product and developing a specific project for a professional master’s degree seem to be the most frequent, not only in our program, but also in others.

Thinking of collaborating with the presentation of possible solutions, I decided to consolidate in this text some premises that I have developed not only in my work as an advisor, but also in conversations with many students that have sought me in order to
share their uncertainties about the subject. It is important to highlight that what I propose does not represent a consolidated thinking within the teachers’ body of our master’s degree program, and it does not present itself as a definitive solution. As a path, it only proposes a course with road signs that guide the traveler, with indications and information that might be useful.

The main objective is not only to offer support to possible candidates in programs of this type, in the design of projects that they will submit to selections, but also to propose to teachers, as advisors and eventual evaluators, in qualification and conclusion boards, a set of topics to verify, for example, the alignment of the propositions with the specifications in the CAPES field document.

For those who do not know my work, I have been coordinating LABCOM – Media Convergence Laboratory for 10 years, where we develop projects on the frontier between communication and technology, in an interdisciplinary effort to dialogue with other fields, such as Design, Computer Science and Data Science. Before entering university, I spent around 20 years acting as an independent professional, having my own business in the audiovisual field and offering consulting services to others. Today, at UFMA and in the Communication field, I develop applied research in projects oriented to the use of emerging technologies in the journalism production process and diffusion of Digital Methods and Design Science in the national academic sphere.

Within this second activity, in 2019, the development of three research support softwares stood out. LNEWS, for the automated collection of textual content from journalistic websites; LTWEET, for the collection of Twitter publications, selected by account or word and LQUALIS, to consult and score publications through the new and old tables from CAPES Qualis Periódicos, allowing score comparison between one and the other and consultations in lots, that is, of many journals at once.

The products, which have the academic public as target and especially the Brazilian researchers’ community in the Communication field, were distributed in different ways. The first two through a public call for beta testers via the lab website (www.labcomdata.com.br) and later liberation of exclusive link accessed by password to the selected. The last product was open access and public from the start through the lab website.

These items are highlighted because they are also an example that summarizes what is desired in projects and products created in professional programs:

a) oriented to real problems solution;
b) that clearly define a set of users and possible beneficiaries of the proposed solution for purposes of validation and adoption;

c) that contribute to the advancement of the field’s state of the art.

Knowing What Capes Says About Professional Master's Degrees

Before anything else, the first step that I recommend for those who want to discuss this question is a little obvious, however, sometimes forgotten: to consult the CAPES field document (2017-2020) for Communication and Information. In it, it is possible to find general considerations about tendencies and the field’s state of the art, as well as indications that are more specific for professional master's degrees. In a simplified summary of what the document highlights for the whole field, some topics are presented.

- Centrality of Communication in Contemporary Society
- Data Volume in the Digital Environment Generating New Research Challenges
- Technological, Social and Economic Transformations
- Rapid growth of professional programs in the area. In Communication we went from 1 in 2013 to 10 in 2018
- Interdisciplinarity (CAPES 2017-2020) - “Within the scope of the programs, it is essential to encourage and implement actions aimed at dialogue with other scientific fields”
- Need for guidance on innovation and creativity
- Inclusion of topics such as Big Data among the new research frontiers, including large volumes of data, visualization, metrics and data science (I discovered, in the document, that my work, however strange it still causes, has a place in our area).

About the final product to be presented, the document offers two possibilities:
Professional education is characterized by the production of applied research through the development of products. It is recommended, for the final product of professional programs: technical-scientific report followed by product; dissertation with the formulation of a product (CAPES, 2017-2020, p. 17).

As examples of what can be delivered:

- Intellectual property and software patents and registrations, including free software deposit in a recognized repository or obtaining alternative or flexible licenses for intellectual production, provided that the use of the academic community or the productive sector is demonstrated;
- Development of educational and instructional applications and materials and products, processes and techniques;
- Production of media programs;
- Publishing; compositions and concerts;
- Conclusive reports of applied research;
- Technical operation manuals, experimental or application protocol or technological adequacy;
- Prototypes for the development of specific equipment and products;
- Technological innovation projects;
- Artistic production;
- Manuals, guides, booklets and tutorials; other formats, according to the nature of the area and the purpose of the course (CAPES, 2017-2020, page 17).

The question of fitting in a wide spectrum of possibilities

The main characteristic of the path I propose is that validation of what is being considered doing should not be only through the inclusion or not of one of these terms in the project that the student intends to develop. I explain: you can produce a media program, a video, for example, that can be considered a valid product for a professional master’s degree, but you can also make an audiovisual that proposes theoretical or purely academic or aesthetical questions, which only speaks and offers comprehension to peers, in a restricted dialogue, only comprehensible to the university’s inside community. In this case, in my opinion, this product is not aligned with what is expected of a professional master’s degree. And why am I saying this?

Defining the problem and the one benefited by the solution

It suffices to read the field document to understand that one of the central characteristics of a master’s degree production is that it must be oriented to the solution of real problems and this involves not only defining a problem and seeking solutions, but also establishing a community or group of possible beneficiaries of the product you are
proposing. Thus, it is not the type of product a or b that will make it fit, neither your will or interest in working with this or that; it all counts, mas the essence of the project’s origin, in a situation that needs improvement or even something completely new, that will align what you will do with the basic idea of a product created in a professional program.

In summary: you have to begin from a clearly defined problem that bothers someone, since it is this someone that, possibly, will validate your solution. You do not do it for yourself, for dilettantism or because you need to do something. You do it for the other, you establish a bridge between the academy and the community external to the university (a very repeated mantra, but scarcely practiced), creating in many ways one of the fundamental metrics in the evaluation of all graduation programs and, mainly, professional ones: social impact.

**Disruptive and incremental innovations**

Another question that scares students is to imagine that they need to create something completely new. Nothing more wrong. In the literature about innovation, there are two basic categories: disruptive innovation and incremental innovation. The first changes the world, creates completely new products, new markets, changes consolidated business models. Example: streaming and the audiovisual digital market, with products such as Spotify or Netflix. This is incredible; however, it is harder and harder to think of something that no one ever thought and create a completely new product or service.

The majority of innovations is incremental, that is, they consist of a set of improvements upon thing that already exist. It is in this territory where we can operate, given that we dedicate all our efforts not only in understanding what already exists, how it works, where it could improve, but also in understanding this through the eyes of those effectively in the context of use. Thus, from a deep understanding about the problem and those who experience it, we can be accredited to propose solutions. In the terms of Design Science (DS), we operate from a class of problems.

The term class of problems that we have been using is also part of the important concepts of DS. Sets of practical or theoretical problems that have already established a set of solutions or artefacts linked to it constitute a class of problems (SANTOS, 2018, p. 24).

From the analysis of the problem, we propose a solution, a product or a process that, according to its level of tangibility, will be defined as a type of artefact.
The concept of artefact can be understood as a final product of the path proposed by DS and, therefore, something that is associated to the specific context of the solved problem. The artefact created by men represents an intermediary between a set of established knowledge in a certain area and the specific conditions that involve the problem that the artefact should resolve (SANTOS, 2016, p. 10).

Types of artifacts are considered by the classification of March and Smith (1995):

- Constructs - they are the most basic elements in the development of SD, conceptual creations whose objective is to define a set of definitions used in the solution of the problem, establishing a kind of vocabulary about a certain field where such problem is inserted. These are the concepts on which the solution operates and that the researcher will use to evolve from the purely abstract to the tangible and applied to a given situation.

- Models - are descriptions about a certain system that establish relationships between previously defined constructs. They are a kind of representation of reality that seeks to describe it, even though through simplifications, but which aims to understand its internal operating logic for use in the solution.

- Methods - are sets of procedures and actions oriented towards the performance of a given task or solution to a given problem. The methods can be related to previously established models, being one more step in the scale between abstraction and tangibility of the solution.

- Instances - the concept of instance or instantiation, well known among programmers and computer scientists, represents in DS perhaps the most tangible level of the solution created in the previous context that inspired it, that is, it represents the artifact in operation in the environment that generated the need of the solution. The instantiations also allow us to evaluate something important within the DS proposal, which is its effectiveness in relation to the proposed problem or the intended improvements in the existing system.

A fifth type of artifact is admitted by some authors who refer to it using terms such as technological rules, design rules or more commonly design propositions.

- Design Propositions - Theoretical contributions that can be made from the application of DS principles to a specific type of problem, or in their own terms, operating on a class of problems.

The CAPES document is clear when it defines that the project constitutes an effort of applied research, that is, that has applicability, which can be used by someone beyond
ourselves. In Santos (2018), it is possible to obtain a more detailed description of the process that involves research with the purpose of applicability.

**Evaluating the adoption potential and applicability**

One of the reasons for Communication students’ difficulty in the design of their projects is that our area, for historical questions, among others, has strong ties with the Humanities, where one is basically trained to describe, analyze and interpret.

One of the current challenges that is already between the lines of what is expected for the future of Communication as a science is that, beyond these essential functions (it is important to highlight), it should now also include prediction and prescription abilities, that is, evolve from a doing sometimes merely observatory, to an activity more oriented towards the social impact of its findings.

Therefore, include in your project, whenever possible, considerations about the adoption potential and applicability of what you are proposing. This is an important exercise that will help the proponent to better understand eventual implementation difficulties of your product or process.

If you imagine solutions that can only be tested in global corporations or with huge money injections, maybe you are fantasizing too much and forgetting again that your work has to solve someone’s problem. If you cannot even get close of approximating solution and user, how will you know if you are on the right track?

Maybe you are not seeing a big set of closer problems, where applicability and the adoption potential will be much higher and where you will have conditions to probe in order to understand the context involved and, thus, qualify to propose improvements or reconfigurations of what already exists.

**Final considerations**

To future professional master’s degree candidates, to end, I would like to say that if what you are going to do is a training media program, an instructional workshop, the proposition of a set of improvements for a certain process, a diagnosis that will help an organization to understand what they can do better, it is already a good start, regardless of the name you will give or if it is in a pre-determined list or not. If your proposal can be tested, even if in a provisory or incomplete way, by the possible user, even better.

To the teachers that eventually also wish to propose new professional master’s degrees in the area or that, already being in one, will need to advise or evaluate projects of solution development and applied character, I hope these notes have some use.
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A world full of problems and opportunities awaits us.

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RESUMO:
Descreve-se um conjunto de orientações para o design e avaliação de projetos desenvolvidos para mestrados profissionais, a partir da experiência do caso do programa da Universidade Federal do Maranhão, o primeiro do tipo na região da Amazônia brasileira. Partindo das especificações do documento de área da CAPES para a área da Comunicação e Informação e dos conceitos da Design Science, o trabalho reflete também os dez anos de experiência do LABCOM- Laboratório de Convergência de Mídias na área da pesquisa aplicada, com abordagem interdisciplinar e criação de soluções de software para apoio ao trabalho dos pesquisadores.

PALAVRAS-CHAVE: Amazônia; CAPES; Comunicação; Avaliação.

RESUMEN:
Se describe un conjunto de pautas para el diseño y evaluación de proyectos desarrollados para maestrías profesionales, basado en la experiencia del caso del programa de la Universidad Federal de Maranhão, el primero de su tipo en la región amazónica brasileña. A partir de las especificaciones del documento de área CAPES para el área de Comunicación e Información y los conceptos de Ciencia del Diseño, el trabajo también refleja los diez años de experiencia de LABCOM - Laboratorio de Convergencia de Medios en el área de investigación aplicada, con un enfoque interdisciplinario y creación de soluciones de software para apoyar el trabajo de los investigadores.

PALABRAS-CLAVES: Amazonia; CAPES; Comunicación; Evaluación.