THESIS SUMMARY

To the Ph.D. dissertation

Daniella Dominika Galla

CHILDREN. HOME. COOPERATION. CREATIVITY.
Designcommunication as an educational methodological tool to support the development of soft skills

Supervisors:

Dr Dóra Horváth
Associate professor

Dr Attila Cosovan
Full professor

Budapest, 2021
Department of Media, Marketingcommunications and Designcommunications

THESIS SUMMARY

To the Ph.D. dissertation

Daniella Dominika Galla

Children. Home Cooperation. Creativity. Designcommunication as an educational methodological tool to support the development of soft skills

Supervisors:

Dr Dóra Horváth
Associate professor

Dr Attila Cosovan
Full professor

© Daniella Dominika Galla, 2021
Contents

1. RESEARCH BACKGROUND AND JUSTIFICATION OF THE TOPIC ............................................... 1
   1.1 AIM AND MISSION OF THE DISSERTATION ................................................................. 1
   1.1.1 Creating an educational methodological tool as a product ............................................. 1
   1.1.2 Dialogue between education and economy ................................................................. 1
   1.1.3 Social dimension of the dissertation ........................................................................... 2
   1.2 AN INTERDISCIPLINARY APPROACH AND THE POTENTIAL FOR UNITY IN DIVERSITY ....... 3
   1.3 THEORETICAL FRAMEWORK ....................................................................................... 3

2. APPLIED METHODS ........................................................................................................... 5
   2.1 RESEARCH QUESTIONS .................................................................................................. 5
   2.2 RESEARCH FRAMEWORK AND SAMPLING TECHNIQUES ............................................. 6
      2.2.1 Multimethod qualitative research strategy .................................................................... 7
      2.2.2 Sampling techniques ................................................................................................ 7
      2.2.3 Data collection methods ............................................................................................ 8

3. SCIENTIFIC RESULTS OF THE DISSERTATION ............................................................ 9
   3.1 A SERIES OF 24 WORKSHOPS ..................................................................................... 9
      3.1.1 Framework – Relationship network (1) ...................................................................... 10
      3.1.2 Class as a community (2) .......................................................................................... 10
      3.1.3 Education for life: development of soft skills (3) .......................................................... 11
      3.1.4 The thrive for development, dimensions of evolution (4) ............................................. 12
      3.1.5 My profession and responsibility: I am a teacher (5) ................................................... 13
      3.1.6 The product (6) ......................................................................................................... 13
   3.2 SUPPLEMENTARY WORKSHOP ..................................................................................... 14
   3.3 SUMMARY OF RESULTS .............................................................................................. 15
      3.3.1 Community building (RQI) ....................................................................................... 17
      3.3.2 Forming soft skills (RQII) ........................................................................................ 17
      3.3.3 Generating a designer attitude (RQIII) ....................................................................... 17
      3.3.4 Entrepreneurial attitude (RQIV) ................................................................................. 18
   3.4 VALUES GENERATED BY THE RESEARCH .................................................................... 18
      3.4.1 Academic contribution of the research ....................................................................... 18
      3.4.2 Practical relevance of the research ............................................................................. 19
      3.4.3 Social benefit of the research ..................................................................................... 19
   3.5 LIMITATIONS OF THE RESEARCH .............................................................................. 20
   3.6 CONTINUATION, CHALLENGES OF THE FUTURE ...................................................... 20

4. MAIN REFERENCES ........................................................................................................... 22

5. LIST OF PUBLICATIONS ................................................................................................. 23
1. Research background and justification of the topic

The keywords highlighted in the title are the real essence of my research. I realised a self-developed, creative educational methodological tool integrated into elementary schools, based on the methodology of designcommunication (Cosovan, 2009), where the subjects of the analysis, the main characters are members of Generation Z. In order to implement the educational methodological tool and to immediately measure its added value, in addition to focusing on children who are open to the world, it was necessary to find a central motive with which children could identify, regardless of their social and economic background. This is how the concept of home, interpreted in a narrower and broader dimension, was given a place. **The session brings the community together through the implementation of a design process, with the aim of creating a collaborative product.** The process is the real result, supporting the development of the soft skills of the employees perceived as the most valuable in the managerial implication.

I started my PhD studies motivated by a desire for education, a personal attitude to impart valuable and useful knowledge to students, while shaping their attitudes, as an inseparable unit of education and upbringing. The choice of research topic was about my own future, while at the same time trying to influence the future of my students through education-focused reform efforts.

1.1 Aim and mission of the dissertation

1.1.1 Creating an educational methodological tool as a product

Overall, the aim is to open children's minds to creativity, to allow space for their development around the home as a tangible theme, through a non (only) tangible creative, design-based educational methodological tool, and to give them a different perspective on the closed school system, which also provides support for employment. **The fundamental aim of the dissertation is to develop, explore the feasibility, test, and present the results of a creative educational practice as a product that encourages active and equal participation of teachers and students alike,** and can be easily integrated into the existing primary school education framework.

1.1.2 Dialogue between education and economy

The question arises as to how research focusing on education and its development relates to the business and management literature. The closest link manifests itself in the fact that
students, who can be seen as the output of education, are the future employees, who can be the effective and successful workers of the future by acquiring skills that match the needs and expectations of companies on the input side. The student, the employee of the future, can be successful if the knowledge he or she acquires in education overlaps with the requirements of the company and the modern economy for its professionals. With the research in this dissertation, I consider it important to maintain and increase the intensity of the dialogue between education and job creators, the most important actors in the economy, and where necessary, to make it more effective. Evaluating the literature review, there is a need for a stronger, more direct and operational (designer) link between teachers, as the driving force of education and innovation, and the actors of the economy who formulate and apply the expectations of workers. We need to do this in order to raise a generation that has the knowledge it needs, needs to be able to fill gaps and can use it, and that can use it to drive the economy and, at the same time, drive personal and social development. This idea is supported by a number of research findings (Archer & Davison, 2008; Hurrell, 2016; Sin & Neave, 2016; Succi & Canovi, 2020). If only considered in the context of the soft skills that are the focus of this dissertation, on the one hand, employers need to be actively involved in the development of soft skills for students and graduates; on the other hand, academia needs to build stronger partnerships with industry and work effectively together to guarantee job-ready graduates (Succi & Canovi, 2020). The results of the educational methodological tool developed as part of this dissertation, obtained through a multi-method qualitative research, aim to contribute to deepening and rethinking this dialogue.

1.1.3 Social dimension of the dissertation

The topicality of the subject is unquestionable, its economic relevance is proven, and the social and environmental benefits of the research are not negligible. The qualitative research carried out on this topic enabled 500 students to participate in an innovative activity, which provided a new experience not only for the children. In developing the research concept, one of the most important aspects of this research was to produce a research that would have a positive impact on education stakeholders and contribute to the support of educational reform efforts. The session is based on a real problem, a real problem of improving the home and the environment, providing an opportunity to support students, giving them the space to create an environmentally conscious and generally caring creative solution. The aims of the dissertation thus include a contribution to the pedagogy of sustainable development.
1.2 An interdisciplinary approach and the potential for unity in diversity

The theme cuts across disciplines and at the same time links disciplines. Its scientific and practical significance can be precisely identified by that. The dissertation made in the Doctoral School of Business and Management in addition to its links to the management literature, it is closely linked to, based on and inspired by the discipline of education and draws on the results of the discipline for a holistic analysis (Jarvis & Parker, 2006). “Interdisciplinary” is a word of Latin origin, defined based on the Dictionary of Foreign Words: Expression “covering more than one disciplines, areas of expertise (refers to the relationship between disciplines)”\(^1\). An interdisciplinary approach is when a researcher brings together knowledge, theories and approaches from different disciplines to produce a scientific work, and prepares his or her research in this spirit, with a view to achieving a specific goal. This kind of approach requires participants to delve into related disciplines beyond their own main research focus, to learn about terminology and differences in scientific understanding. Importantly, the interdisciplinary approach to research at the boundaries of disciplines differs from the multidisciplinary approach in that the researcher crosses the boundaries of his or her own discipline and the result is the construction of the cumulative knowledge that is gained from crossing boundaries (Bognár, 2016). The interdisciplinary approach that determines this dissertation contributes to solving questions that cannot be solved within a single discipline, and also supports the contribution needed to solve societal problems (D. D. Horváth, Csordás, Horváth, & Cosovan, 2020).

1.3 Theoretical framework

Theoretical framework of this dissertation can be divided into three parts. The starting point was to map the Hungarian educational framework through the dimensions identified as a result of the literature analysis: (1) the set of rules and systems that characterise the primary school as an educational institution in the present day, (2) the presence of creativity in a rule-bound primary school, (3) the potential of cooperative teaching methodologies and group work in problem-based learning, (4) the roles of teachers and the challenges they face/motivate, (5) the student population, Generation Z, who are the key participants in the research.

In the second major unit, the theoretical review focused on the relationship between the actors of economy and education and explored the potential of this relationship. Public education in our country is a governmental duty, so it goes without saying that the development

---

\(^1\) Dictionary of Foreign Words (https://idegen-szavak.hu/interdisziplin%C3%A9ris), Downloaded: 30/01/2021
of educational science is inseparably linked to the political and economic development of the society in question (Csapó, 2011). The strongest link between education and the economy are the actors themselves. Those Generation Z students, as presented and discussed in the first part of the theoretical review, who are currently still in school will in a few years' time enter the labour market and become key players as drivers of the economy. Such actors who are expected to become lifelong learners, who need to be equipped with useful knowledge adapted to social and economic needs (Csapó, 2011). The second half of the 20th century saw an unprecedented increase in the value of knowledge and a parallel increase in the expectations placed on the workforce. The tasks of pedagogy, interpreted as the interface between education and the economy, have thus multiplied: it is concerned with the transfer of usable, exploitable knowledge (Csapó, 2011). An integral element of the second part of the theoretical review is the mapping of soft skills as an increasingly important employee expectation, their role in education, their measurement practices and their development possibilities. There is empirical evidence from a number of studies that soft skills also vary, can be developed, and are not present with the same intensity and quality at different stages of life. The energy invested in their development is therefore important, the most important period being school development in early childhood (Fazekas, 2018; Schulz, 2008). The most ideal environment for the development of non-cognitive skills is the school, but this requires a motivated teacher, as the development of soft skills requires different competences from the teacher (J. J. Heckman, Humphries, & Kautz, 2014 in K. Fazekas, 2018).

In the final part of the literature review, I present the most important building block of my self-developed educational methodological tool, the designcommunication methodology. **Designcommunication is defined as communication integrated in development and evolution** (Cosovan, 2009). The methodology of designcommunication is a creative, academically based methodology that seeks to best combine theoretical foundations with practical experience. Designcommunication methodology, which enables and supports the development of soft skills, provides a very flexible framework and a well-established methodological background, offers a new vision to the group of users beyond the previously familiar, known and recognised toolset. As the thesis deals with a cross-disciplinary topic, because it covers the fields of education and training, business communication and management, the methodology is a conscious intersection of the disciplines of planning and business communication. Designcommunication methodology is the interface, the communication channel for initiating dialogue between education and business. The literature review of designcommunication methodology was carried out through the following
dimensions: (1) The conceptual background and precise definition of designcommunication is presented. (2) The basis theses and the explanation of relationships that determine these theses are presented. (3) The value category and sustainability of designcommunication is presented, (4) and its educational context. The method is placed in the relation of (5) design thinking and positioned in the (6) broader scientific space.

The summary figure of the literature review (Figure 1) visualises the results obtained and the relationships explored. Through its comprehensive and deeper understanding of the topic, the literature review helped to develop the research concept and to formulate precise research questions that aim to answer the gaps in the academic literature.

**Figure 1. Map of the theoretical summary in the light of the most important linkages**

2. **Applied methods**

2.1 Research questions

In this research, the focus was on the educational methodological tool I developed as a product (“I wish to make my home a better place!” workshop). I formulated the central (main) research question as follows: How the use of designcommunication (designer networking) as a creative educational methodology through a workshop shapes and forms the participating community (students, teachers)? How does open-ended problem-solving contribute to communication within the group under study? Its contribution and influence are assumed in the
following dimensions: (I) community-building, (II) development of soft skills, (III) development of a designer, creator identity, (IV) rise of entrepreneurial competences. I seek to answer the questions raised by the fixed dimensions through the following research sub-questions.

(I): How does the workshop help community-building?
(II): In what way, in what directions does the workshop shape the students’ soft skills?
(III): How the workshop shapes the students' designer identity?
(IV): How does the workshop and the community shape the intensity of the entrepreneurial attitude and spirit?

2.2 Research framework and sampling techniques

The figure below illustrates the research design used in this dissertation in relation to the research question and sub-questions. The central element of the research is the self-developed educational methodological tool, which was created and completed as an objective and a consequence of the dissertation. The product was designed through continuous insights based on designcommunication methodology. The path took shape in the process, which clearly required me to base my research on a methodology that was adapted to it and made it possible. There was therefore no doubt that the most accurate answer to this complex research question required a qualitative approach.

Figure 2. Visual plan of the research plan in the context of the central product and the research question

Source: own elaboration
2.2.1 Multimethod qualitative research strategy

In line with the above research questions and objectives, this doctoral dissertation is therefore based on a purely qualitative research methodology. At the heart of this research is the relationship between soft skills and education, so it was felt important to be able to draw on a methodology that could be adapted to the choice of topic in all of its elements. In the case of the qualitative methodological approach, there is no well-defined path, redefinition is a specificity of the methodology, a developmental step. The researcher is the route planner and is also responsible for marking the landmarks, which also requires a high degree of creativity. The path, the terrain, the boundaries, and the point of view change many times, in many ways, until the system that the researcher has created becomes clear and visible. It takes patience, dedication and perseverance (D. Horváth & Mitev, 2015). Among the qualitative methodological approaches, strategic directions, the strategy of this research is multi-methods, i.e. research strategy with multiple methods (Fielding, 2012; Harrison & Reilly, 2011; Morse, 2003; Neulinger, 2016). Repetition of the research was not done until theoretical saturation (Mitev, 2012), the workshop was conducted in every Hungarian county, and to Budapest. In this way, the aim is the added value at the local level, which the creative educational methodological tool I developed would provide to the participants, while continuously developing and improving the product through the incorporation of the added value of the participants. So, the workshop was accomplished in 19 counties, in Budapest, and in a transborder Hungarian settlement in addition to the pilot occasions, altogether 24 times (in three counties I made workshops for two communities). To validate the qualitative research, the most efficient tool to assess validity, triangulation (Sántha, 2009) was applied.

2.2.2 Sampling techniques

The ideal sample for this research is an eight-grade, state-supported district school, where group work and innovative, non-traditional active learning methods are rarely or not used, and their use is not a curricular obligation but depends on the attitude of teachers. The selection criteria were based on the following conditions: (1) 8-grade elementary school, (2): publicly founded institution, (3): normal curriculum, following the National Core Curriculum, (4): Hungarian-language primary school that cover every county and Budapest, (5): the school's and teachers' openness, flexibility and increased interest in science are an added value, but not a primary selection criterion. The schools, sampling dates and locations are summarised in the table below.
Table 1. Summary of the realised school sessions by date and location

<table>
<thead>
<tr>
<th>County</th>
<th>Date</th>
<th>Town</th>
<th>School</th>
<th>Number of</th>
<th>Sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bihor County</td>
<td>Thursday, 17th Sep</td>
<td>Tapolca</td>
<td>Kazinczy Ferenc Member Institution of Bódros Lajos Primary School of Tapolca</td>
<td>35</td>
<td>640</td>
<td>994</td>
</tr>
<tr>
<td>Pest County</td>
<td>Sunday 29th Sep</td>
<td>Nagykőrösy</td>
<td>Il Károlyi Ferenc Primary School of Nagykőrösy</td>
<td>15</td>
<td>180</td>
<td>295</td>
</tr>
<tr>
<td>Hegy County</td>
<td>Monday 23rd Sep</td>
<td>Tapolca</td>
<td>Béla Ferenc Primary School of Tapolca</td>
<td>16</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Borsod-Abaúj-Zemplén County</td>
<td>Tuesday 1st Oct</td>
<td>Bodrogkövesd</td>
<td>Il Ilia József Primary School of Bodrogkövesd</td>
<td>19</td>
<td>450</td>
<td>644</td>
</tr>
<tr>
<td>Komárom County</td>
<td>Tuesday 8th Oct</td>
<td>Hódmezövásárhely</td>
<td>Varga Tamás Primary School of Hódmezövásárhely</td>
<td>32</td>
<td>382</td>
<td>414</td>
</tr>
<tr>
<td>Tőkés County</td>
<td>Tuesday 22nd Oct</td>
<td>Tőkés</td>
<td>Kossuth Lajos Primary School of Tőkés</td>
<td>23</td>
<td>400</td>
<td>634</td>
</tr>
<tr>
<td>Szabolcs-Szatmár-Bereg County</td>
<td>Friday 5 November</td>
<td>Barcs</td>
<td>Regular Art School of Barcs</td>
<td>15</td>
<td>540</td>
<td>695</td>
</tr>
<tr>
<td>Jász-Nagykun-Szolnok County</td>
<td>Friday 8 November</td>
<td>Beregcsaba</td>
<td>Chosini Ferenc Kőbánya Catholic Primary School of Beregcsaba</td>
<td>15</td>
<td>260</td>
<td>415</td>
</tr>
<tr>
<td>Békés County</td>
<td>Tuesday 12th Nov</td>
<td>Mecsekené</td>
<td>Primary School, Primary Art School and Student Hostel of Mecsekené</td>
<td>23</td>
<td>414</td>
<td>647</td>
</tr>
<tr>
<td>Fehér County</td>
<td>Tuesday 19th Nov</td>
<td>Barcs</td>
<td>Szásznerd Szépmúdi Primary School and Primary Art School</td>
<td>25</td>
<td>180</td>
<td>434</td>
</tr>
<tr>
<td>Komárom-Esztergom County</td>
<td>Friday 22nd Nov</td>
<td>Drégó</td>
<td>Zrínyi Bona Member Institution of Hungarian-English Bilingual School and Primary School of Drégó</td>
<td>15</td>
<td>116</td>
<td>266</td>
</tr>
<tr>
<td>Hajdúnánás County</td>
<td>Wednesday 10th Nov</td>
<td>Debrecent</td>
<td>Olányi Pal Primary School of Debrecent</td>
<td>25</td>
<td>466</td>
<td>711</td>
</tr>
<tr>
<td>Győr-Moson-Sopron County</td>
<td>Tuesday 3rd Dec</td>
<td>Tiszaszentmiklós</td>
<td>Coszolányi Vitéz Mihály Primary School of Tiszaszentmiklós</td>
<td>12</td>
<td>250</td>
<td>370</td>
</tr>
<tr>
<td>Somogy County</td>
<td>Friday 13th Dec</td>
<td>Kaposvár</td>
<td>Zrínyi Bona Hungarian-English Bilingual Primary School</td>
<td>21</td>
<td>380</td>
<td>590</td>
</tr>
<tr>
<td>Zala County</td>
<td>Friday 13th Nov</td>
<td>Mezőtúr</td>
<td>Dr. Széky Teréz Primary School and Nursery School</td>
<td>24</td>
<td>380</td>
<td>624</td>
</tr>
<tr>
<td>Zala County</td>
<td>Friday 17th Jan</td>
<td>Tapolca</td>
<td>Kazinczy Ferenc Member Institution of Bódros Lajos Primary School of Tapolca</td>
<td>14</td>
<td>640</td>
<td>784</td>
</tr>
<tr>
<td>Baranya County</td>
<td>Tuesday 21st Jan</td>
<td>Pécs</td>
<td>Béla Tóth Street Primary School of Pécs</td>
<td>20</td>
<td>414</td>
<td>618</td>
</tr>
<tr>
<td>Vas County</td>
<td>Tuesday 21st Jan</td>
<td>Szombathely</td>
<td>Pongrácz Street Primary School</td>
<td>23</td>
<td>440</td>
<td>673</td>
</tr>
<tr>
<td>Nógrád County</td>
<td>Tuesday 4th Feb</td>
<td>Débrecen</td>
<td>Miklós Kálmán Primary School of Débrecen</td>
<td>10</td>
<td>180</td>
<td>280</td>
</tr>
<tr>
<td>Szabolcs County</td>
<td>Friday 7th Feb</td>
<td>Pécs</td>
<td>Dániel Gergely Primary School</td>
<td>19</td>
<td>410</td>
<td>609</td>
</tr>
</tbody>
</table>

Source: own elaboration

The sampling was carried out taking into account the above selection criteria for schools, applying the qualitative sampling techniques presented by Horváth–Mitev (2015) called snowball or chain sampling (D. Horváth & Mitev, 2015). The starting point, also the place of the pilot study, was the Kazinczy Ferenc Member Institution of Bárdos Lajos Primary School of Tapolca, which helped the first steps with its partner institutions and network of relationships.

2.2.3 Data collection methods

As part of a multi-method qualitative research strategy, several qualitative data collection methods were applied (Figure 3), which are, in order of implementation, as follows:

(1) in-depth interview with the homeroom teacher of the analysed class, because he or she is the officially appointed leader of the group (Mészáros, 1998), (2) participatory observation, through the realization of the designcommunication workshop, (3) reflections and analyses written by student participants. Related to in-depth interviews and reflections projective techniques were also applied. Coding of reflections and in-depth interviews was built on the direction of grounded theory represented by Strauss and Corbin (Strauss & Corbin, 1994).
3. Scientific results of the dissertation

The way that leads to the results is based on two definitive elements. One of them is a series of 24 workshops, integrated into the research plan, aimed at detecting, sampling as widely as possible. The second element is complementary research, which aims to further validate the findings by focusing on a repeated study of a community in a similarly real-life setting, under the guidance of a teacher. Some key dimensions of the results are presented along the two pillars.

3.1 A series of 24 workshops

In this dissertation, the analysis and coding were carried out in each location. As a result of the exploratory qualitative research, identification of important processes in relation to the research questions was successfully done. The theoretical background for coding was provided by Strauss and Corbin’s three-stage coding structure (Strauss & Corbin, 1994). Summarising the central codes identified by site, filtering out repetitions and highlighting intersections, the following key categories were brought into focus: (1) The framework and the relationship network that influences it, (2) Class as a community, (3) Education for life: skill development, (4) Dimensions of evolution, (5) My profession: pedagogue, (6) The product. The key milestones on the way to the results of this thesis are the code categories identified and presented here, reinforced by quoting students' and teachers' reflections.
3.1.1 Framework – Relationship network (1)

As a result of the research, the physical framework and personal network of relationships that provides the starting point to which the actors in the process must either adapt or seek to shift in a positive direction is clearly emerging. This is where certain educational policies have emerged, which teachers are critical of, but cannot exert their own individual influence. Most of the existing policies are seen as a barrier to innovative, forward-looking processes, and change can only be achieved by bringing the community together (“We are very restricted. Obviously, you can't say that there's no prescription as to what you have to learn or teach, but there are other ways of getting to the same place that we don't have the opportunity to do.”). As a physical factor of the framework, the infrastructure of the school, be it the building of the institution or the digital equipment, was often identified as a very significant barrier. (“Internet access is slowly becoming a godsend, if we can use it, we don’t always have it”).

The personal relationship network is more important than expected. The homeroom teacher, as the central, dominant unit in the system, is present as the facilitator of relationships. The relationship between the homeroom teacher and the class has important implications for the research question and is supported by the literature analysis that, in addition to factors supporting creativity, a good teacher-student relationship is necessary for innovation to develop (Ferrari, Cachia, & Punie, 2009). There was also a surprisingly strong emphasis on parents, both in terms of the relationship with the teacher and the student-parent relationship. Values (not) brought from home, educational guidelines from parents (“Parents are just as busy, working, doing everything, and child parenting, and I see it as taking a bit of a back seat.”) significantly influence, and in many cases, limit the teacher's options, but most importantly determine the level from which the development process can start (“We can add a lot of things here, but we can't really change the basic attitude. They should also educate them at home.”). A particularly strong element was the teacher's relationship with colleagues and his/her position in the teaching community, and the management team, which controls processes and makes decisions at school level, was considered an integral part of the network of relationships.

3.1.2 Class as a community (2)

The notion of class as a community, in its different dimensions, has permeated the whole research process. It was presented from the perspective of the teachers, who recorded the strengths and weaknesses of the current classroom community, as well as highlighting the shortcomings that are typical in the life of the community (“There is still room for improvement
in the community's relationships”). The pursuit of classroom community was also raised by teachers as a task that they should do (“To have a coherent class is the job of the homeroom teacher”). There was also a focus on the hypothesised relationship between class community and learning outcomes (“personal development is also very important, as community development. I think both are very important for their learning outcomes”), which was a new approach for the teachers, it hadn't come up before.

From the students' perspective, the key factor is community, they highlighted it during the designcommunication workshop from a myriad of aspects, it can be interpreted as one of the most significant results of the research. The factor of experience has emerged (“I had a lot of fun, our class has never been able to develop so well”), the need to spend quality time with their peers. They expressed that class-level and/or cooperation in small groups (“It was really good to see how well the whole class works”), – of which the creator-designer process is an integral part – how important it is for them. This includes shared thinking (“I liked that we thought together when we worked together”) and agreement, too (“It was good to see that the class agreed”). They recognised when this was successful and identified problems when it was not smooth, i.e. they were able to self-critique as a result of the workshop. The greatest benefits of the session were the evolution of community, the strengthening of the classroom community (“The program improved the class”, “I had a very good time, because we got closer with the class”) through the experienced creator process. The community was also present at the level of the product created, and the result was seen as a collective success (“It was good, when, together with the class, we created the essence from the collected projects”).

3.1.3 Education for life: development of soft skills (3)

Soft skills have emerged much more strongly than expected, and their growing importance, which is also confirmed by the literature (Hurrell, 2016; Succi & Canovi, 2020; Zoltayné Paprika & Nagy, 2013). Beyond their role in education, they have also received a great deal of attention in preparing them for life and work (“cooperation is very important and I always highlight them that this is the future. Then, when you get a job, you will have to work with people you don’t want to work with, so learn how to do that now. That’s what I’m trying to give them here”). Based on the research, teachers recognised that the development of soft skills and their conscious application is essential for staying alive, creating value and being a successful employee (“To be grown-ups who create value it is indispensable for them to be creative, and be able to use their creativity”). However, teachers say that in the long term, this
will require a redefinition of the framework for performance assessment, as a scale of one to five will not be optimal for assessing soft skills (“And they don’t get a grade, they get an assessment. Or every six months, at the end of the year, there would be a test, but then I wouldn’t give a grade, but a text assessment. Because these five grades are terribly inadequate, and for this generation these five grades are not good enough.”). The need to redefine the framework of performance assessment is supported by the literature, as test-based, easily measurable accountability is not only not suitable for measuring soft skills, but also appears among the factors that inhibit creativity (Sahlberg, 2009). In the relation of soft skills, beyond the already mentioned cooperation among the code category of class community, creativity, communication, and problem-solving were emphasised as a result of the research analysis.

3.1.4 The thrive for development, dimensions of evolution (4)

Evolution was registered as a separate code, but its elements are overlapping, and cover other code categories. This includes the progress made in the classroom and the fact that the workshop provided an opportunity to develop students' creativity, but also that teachers see the need to develop soft skills as a priority. But there are other important dimensions of progress to be reported in the key findings of the 24-station research.

In addition to the positive results on student development, the designcommunication workshop also aims to develop teachers, which is increasingly needed (“The majority, two third of our colleagues are between 40-50 years old. A large part of them is that it’s good the way it’s learned, and it carries on”). In the designcommunication workshop two ways of development can be observed, one from the students’, another from the pedagogues’ side. This can be facilitated by the two most important factors in the network of relationships outlined earlier: management and colleagues (“But all of our teachers strive to be constantly improving, to seek, and together we look for these [opportunities]”).

Evolution is also reflected in two aspects through the teachers of the future. On the one hand, teachers consider it necessary to reform teacher training, integrating new, innovative methods into the curriculum. (“they are not equipped with sufficiently efficient methods. But this is the job of teacher training. They are not provided with usable active methods.”), at the same time, they are confident that the fresh graduate teachers’ energy and modern approach to teaching and learning that they represent will motivate and encourage other colleagues to develop (“From each other, from younger colleagues, from presentations, by seeing, listening to, applying, improving on your own class”). But the real unity and progress would come from a new view of young people, sharing the experience of older colleagues and
then **building new basics on this common knowledge** (“But I think we need openness from us, young people towards them, because they have a lot of experience”).

3.1.5 My profession and responsibility: I am a teacher (5)

The most important competence of a teacher should be to choose education as a profession, so he or she will also have a particular sense of responsibility towards the local community (Hernádi és mtsai., 2008). One of the results of the research was that the personality of the pedagogue, as revealed during the in-depth interviews, allowed inferences to be made about the class unity, the relationship between students and the **expected quality of the work together**, which was also confirmed in the results of the participatory observations. So, the teacher holds up a mirror to the class. This also meant that the research was typically carried out with committed teachers who were open to new ideas, innovative and committed, but even so, in many cases there was a lack of motivation, which was a barrier to innovation (“even if we are there for 24 hours, I can’t spend any extra time for my ideas, because my energies are consumed by being with the children”, “Who is not so open to things summarizes that it is a lot of work, it brings him or her more load. And he or she is already exhausted.”, “I don’t have time for this. I should make a lot of extra programs. From this, time, I always have deficiency.”). In several cases, it was found that innovation could only be measured in communication, not in action, as the work of the class proved. So it is not enough if a teacher is committed, his or her individual values (V. Wilson, Powney, Hall, & Davidson, 2006) also determine his or her personality, and by that, the model for students. For students, the prominence of the ideal function, the unfamiliarity of taking responsibility besides themselves, reinforces the exemplary role of the teacher’s behaviour (Cseke, 2007). **If the pedagogue is present with his/her whole personality in his/her teaching/educational activities, it contributes to becoming a real role model for his/her students** (Lévai, 2013), which is both a responsibility and an empowerment to influence students in a positive way, as well as to motivate them to embrace new things.

3.1.6 The product (6)

The resulting outcomes were analysed as a summary of participant observation by location. The specificities of the outcomes resulting from the session have informative elements in relation to our research question and beyond. The research revealed that the group dynamics and the examination of the concept of home during the joint task solution did not primarily mobilize the concept of the expected family home in the children but was interpreted on a level
of abstraction that went beyond this. **The common home theme, making the home a better place to live, has almost exclusively elicited ideas of environmental sustainability from the students**, an outcome in which I attribute a large role to group work, wikinomic collaboration (Fuchs, 2008) and the conceptual framework of “good” as defined by design communication. During the exercise, they searched for and found a common point of reference in the wider home, namely environment. Related to the new product, the students were motivated by the desire to improve, to do something good together for their future, for their environment, and to create value together. (“I liked that we had to, so to say, do the world a better place” “I liked it a lot that the theme was how to take care of the Earth”) This in itself highlights the effectiveness of the methodology, since this is one of the objectives of design communication.

3.2 Supplementary workshop

In order to answer the research question in a precise and complete way, in addition to the already presented results, a complementary series of workshops was organised organically, not yet included in the original research plan. Its creation was motivated by the experience of the above-mentioned activities and the results of the analysis. In order to integrate the product, designcommunication workshop, into the educational framework, I felt it was important to examine what happens when an active teacher observes the positive effects associated with the workshop through his or her own class, which also brings us closer to answering the research question. In addition, the importance of conducting exploratory research in all counties is underlined by the results of conducting the research with the same community on several occasions. The sampling width of the research is therefore given by the 24 designcommunication workshops and their results, and this additional study allows for a deeper exploration of the research, looking for possible connections in another dimension of the research question. A characteristic of the qualitative methodology is the continuous evolution of research frameworks, the possibility of addition for deeper understanding (4) Evolution and (3) development of soft skills had significant role. The latter was more visible as a result of the repeated nature of the workshop, from the viewpoint of the community and the teacher. Partly related to this category of code is the forward-looking nature of processes in the (2) class as a community, realised week by week by the trainer, the observer, and the participants. In strengthening the community, the designer and creator process as a pathway to the (6) product was more prominent during the complementary workshop series. The formerly defined 6 key dimensions were complemented with two further elements in the present empirical supplementary research. (7) Failure as an event that greatly contributes to the shaping and
development the community, as well as (8) entrepreneurial attitude that has to be answered related to the research question has also been given space in connection with the new topic.

3.3 Summary of results

In this dissertation I was looking for the answer to the question: how does the application of designcommunication (designer networking capability) as a creative educational methodology through a workshop shape and form the participating community (students, teachers)? As a result of the research, I can state that designcommunication methodology shapes the actors of the community at several levels and from several directions. The dismantling of the hierarchical relationship between teacher and student, the new basis of equality throughout the session, ensures a visible rapprochement between student and teacher. This rapprochement can also be seen among students, who deepen and rebuild their relationships through shared success as a result of group and class collaboration. Convergence as a horizontal process is the result of designer interaction, but there is also a vertical sense of improvement. The dimensions of evolution can be seen at three levels, particularly when the teacher is the implementer of the activity. There is an evolution in the person of the pedagogue, who has to take on a new, hitherto unknown role. Evolution of students can also be analysed from two further aspects. Individual evolution, and evolution of a group as a community through the designer-creator process. Research results were visualised in a figure (Figure 4), which shows the parts of the empirical research that led me to answer the research questions. The figure presents the results of the 24-station workshop – that determines the main direction of the research – harmonized with and complemented with the results analysed on the supplementary workshop. The two main parts of the empirical research, besides the literature review, contribute together to the exploration of the research questions. In addition to the research questions, the analysis also explored further findings related to the questions, which are also included in the figure.
Figure 4. Summary of the results of the empirical research

Results related to the research question(s)

(I) Community-building
[experience, conversation, common success, open problem-solving - (2), (6), (7)]

(II) Shaping soft skills
[cooperation, creativity, communication - (3)]

(III) Creating designer identity
[by creating a product - (6), (2), (4)]

(IV) Entrepreneurial attitude
[low presence, depending on the topic, sheds light on the shortcomings - (8), (6)]

Results beyond the research question(s)

(V) Multiple dimensions of evolution
[pedagogue, student, community, future pedagogue... - (4)]

(VI) Importance of freedom
[role of independence, hierarchy-free relationship system - (1), (4), (5)]

(VII) Opportunity in failure
[recognition of development potential - (7), (5), (2)]

(VIII) Role of pedagogue
[importance of personality beyond profession - (3), (5)]

Source: own elaboration
3.3.1 Community building (RQI)

The design communication workshop helps to build community (I) by providing opportunities. It gives the class the opportunity to spend quality time together, giving them an experience. It creates an opportunity for discussion, which is clearly a niche, which they need and demand. It gives the opportunity by building on open problem-solving, so that the path to a solution can be tailored to the individual, to their community, which helps them to feel it their own. **By focusing on an open problem-solving situation, it opens the way for imagination and creativity to flourish.** Giving students more freedom, without specific guidance, gives them the opportunity for autonomy. On the one hand, they need to improve at this, and on the other hand, students really see success as a result of their own performance and cooperation. This determines the relation between the outcome created and the students. **It highlights the importance of value creation** for students by focusing on the good things.

3.3.2 Forming soft skills (RQII)

**Research highlights the growing importance of soft skills** (II). Teachers have recognised the need and the responsibility. This was partly due to the fact that, seeing the students' deficiencies, the need to develop soft skills was no longer in question. On the other hand, teachers perceived that education for life, preparation for the world of work, and changing expectations require the integration of these skills into education, regardless of the lack of central regulation. Emphasis was placed on **problem solving** (critical approach), **creativity**, **communication**, and **cooperation** (as a function of communication). The research proved that the soft skills recorded above are directly or indirectly influenced by the workshop, and this was particularly evident during the complementary workshop, where a positive change was observed from session to session.

3.3.3 Generating a designer attitude (RQIII)

The students identified very quickly with the role of designer (III), building on real-life design processes they settled easily into this role. Initially, the interactive presentation only introduced the design tasks in their lives (“I plan my day”, “I figure out what I will be wear”, “I draw something beautiful”), then, by the second half of the session, they had become the designers and were given the tasks involved (“I was thinking as a designer and created together with my peers”). It supported their independence, they felt they had to hold on as adults (“We have experienced the difficulties of creating something new, what to look out for, how to think it through”). **The shaping of the designer's identity was fulfilled through the creator (flow)**
experience, which is closely linked to the attitude towards the outcome and the success of the collaboration through design. (“I believe that our common house that we created together turned out well, based on our imagination”).

3.3.4 Entrepreneurial attitude (RQIV)

Entrepreneurial attitude (IV) was much less present than expected, as can be seen in the chapter on the analysis of outcomes. This is also problematic because it is worthwhile to expose entrepreneurial attitudes at as early an age as possible in order to increase the likelihood of developing entrepreneurial proclivity. (K. Wilson, 2008). The lack of this can be attributed to several things. On the one hand, this is due to the fact that they receive very little economic and entrepreneurial education at school, and thus do not have a dominant presence in their thinking, a phenomenon that the research has thus highlighted. But what is more important is the topic. The home, and then the environment linked to it, its protection and sustainability, demanded much more of a non-profit character as opposed to profitability. The complementary workshop had a higher proportion of concepts related to entrepreneurial attitudes, but it was also not considerable. The characteristics of designcommunication workshop and open problem-solving situation can support the promotion of an entrepreneurial attitude through a well-directed choice of topics, but this requires that the conscious teaching of economic knowledge be embedded in everyday life. Pedagogues are also key players in the socialisation of constructive, rule-following entrepreneurial skills, as confirmed not only by the empirical research of this dissertation, but also by the literature review (Fülöp & Pressing, 2012).

3.4 Values generated by the research

3.4.1 Academic contribution of the research

The scientific added value of this doctoral dissertation is, on the one hand, the partly suppletory literature review and, on the other hand, the result of empirical research. The attitudes, responsibilities and roles of key educational actors in the development of soft skills have never been analysed before in such a coordinated and cross-disciplinary way. The soft skills of students are present as an output on the education side, while at the same time these skills are gaining importance on the employer side, where they represent the entry threshold. The review of the literature and the results of the empirical research show that the attitude and the personality of the teacher are of key importance, they are the driving forces behind the process, they can create a dialogue between science and business practice, provided they are methodologically prepared to do so.
The academic imprint is further strengthened by the setting of the Hungarian designcommunication methodology in the academic sphere, exploring its interfaces and most significant distinctive features in the context of other academic methodologies. As a result of empirical research, the need to develop soft skills and entrepreneurial attitudes in primary schools are considered as outcomes. The potential of the designcommunication methodology has also been proved, such as its positive influence on the development of designer identity, the strengthening of class community and the promotion of creativity, which also imply the scientific contribution of the thesis to the academic literature.

3.4.2 Practical relevance of the research

I consider the most important practical outcome of the dissertation to be the resulting educational methodological product. A tangible value for teachers and educational stakeholders has been created by providing them with a methodology that supports them in enabling the conscious and guided development of students' soft skills within the school framework. If teachers wish to learn the methodology, they will also be brought closer to the academic community through training, thus creating a link between different disciplines and practice, and thus allowing for more dimensions of interdisciplinarity.

This dissertation is of value to economic actors through the literature and the results of the empirical research that support it. The need and demand identified by teachers for the development of soft skills is in line with the requirements of employers for future employees identified in the literature analysis. Designcommunication workshop represents a BRIDGE between the two actors, enabling a tighter harmonization of interests. Integrating the soft skills that employees consider the most important into their training can be put into practice through a self-developed workshop. As the results of the empirical research have shown, its application allows for smoother collaboration between community members, improves individual and group communication, and catalyses and supports the development of creativity.

3.4.3 Social benefit of the research

The most important social contribution of this doctoral work is the empirical research process itself. Sample collection was deliberately not done till theoretical saturation. I felt it was important to visit at least one school in every county in Hungary, and to ensure the participation of at least one class to experience a session based on innovative and creative methodology. Positive feedback from teachers and reflections from students along the experience, the researcher and the dimensions of the learning/development process showed that
the social utility of the research beyond the academic goals was indeed realised. **The 24 workshops brought designcommunication methodology to nearly 500 students.** The schools included a significant number of institutions with a large number of disadvantaged or severely disadvantaged children, for whom this kind of experience is a unique and defining experience. Designcommunication is an empathy-based approach that focuses on the value category of objective good. This was considered during designing this research. The primary goal was that **this research should not be purely arbitrary, that it should not only serve science, but that social value was aimed to be created with it.**

3.5 Limitations of the research

The summary of the limitations of the research also partly indicates future research directions. The identification of limitations also provides an opportunity to analyse research results from a different perspective in the future. In the empirical research, the focus was on the actors of education, and the results obtained as output can provide valuable information for the corporate actors. However, in order to deepen the dialogue between education and business, it would be important to go beyond the literature analysis and explore the motivations on the company side.

The pandemic situation during Covid-19 can be indicated as a research limitation, which could not enable me to be present personally during the complementary workshop. Personal observation of the teacher, the children and the session would have added value to the results. This also meant that the teacher had the opportunity to work independently. The resulting individual learning process may imply a more complex, but in the long run more effective development and the courage to apply the method more frequently.

The dual role of the researcher could also be interpreted as a limitation, as she had to be present in the process as an observer and researcher at the same time, which – in the case of a qualitative research strongly linked to fieldwork – could imply an intensive involvement and a subjective filter, which could distort the results of the research.

3.6 Continuation, challenges of the future

**The challenge of the future practically starts with this dissertation for me.** The aim of this doctoral study was defined as the creation of an educational methodological tool that can be integrated into the closed system of primary schools through the involvement of teachers. The identified values of the method and the results of the empirical research provide the background to start a broad dissemination of the educational product by addressing the key
actors in education. The forced school closures caused by the pandemic and the transition to digital education have had an unforeseeable impact on the student community and personal relationships (de Araújo, Veloso, de Campos Souza, de Azevedo, & Tarro, 2020; Gupta & Jawanda, 2020), which is another argument in favour of a greater prevalence of methodologies focused on collaboration, communication and community empowerment.

At the same time, a research map will be drawn up for the business side and the willingness to cooperate will be explored. In the future, depending on the outcome of the research, the actors will be linked, and their actions coordinated in order to raise a generation that is cooperative, creative and highly communicative, and consciously prepared for the world of work.
4. Main references


kapcsolódóan. Oktatás-Informatika, 1-2. sz. online.

5. List of publications
Journal article:


**Participation at conferences with publication of the full paper submitted:**

**In Hungarian**


Zoltán; Sasné, Grósz Annamária; Liska, Fanny (szerk.), Ismerjük a vevőt?: A vásárlás pszichológiája : Az Egyesület a Marketingoktatásért és Kutatásért XXV. Országos konferenciájának előadásai Veszprémben, Magyarország : Pannon Egyetem, 721-729.


In English


**Book chapter:**


**Other publication of public interest:**