

## Improving social competencies of architecture students through participatory design of marketplace regeneration

Justyna Borucka†, Piotr Czyż†, Weronika Mazurkiewicz†, Łukasz Pancewicz† & Iga Perzyna‡

Gdańsk University of Technology, Gdańsk, Poland†  
City Initiative Association, Gdańsk, Poland‡

**ABSTRACT:** The authors of this article discuss the involvement of architecture students in urban regeneration projects through participatory design, and consider whether this can improve the students' social competencies, thereby benefiting their future careers as architects and urban planners. On the example of student workshops conducted in 2019, the authors present specific methods applied in the participatory process and their positive impact on the students' social competencies and the educational benefits of using this methodology in university courses. The student workshops were linked to an ongoing project on the regeneration of urban markets across Poland, conducted within the Polish national research and development programme - GOSPOSTRATEG. The real-life experiences of students participating in such enterprises seem to be crucial in attaining high levels of social competencies. This is even more important in the context of the changing role of the architectural profession in the contemporary complex reality.

### INTRODUCTION

The enhancement of students' social skills is a key issue across all universities. The authors of this article, posit that the involvement of architecture students in spatial development, and specifically in actual urban regeneration projects through participatory design can improve their social competencies, thereby benefiting their future careers as architects and urban planners. By using the example of the student workshops conducted in 2019 in the Faculty of Architecture at Gdańsk University of Technology (FA-GUT), Gdańsk, Poland, in relation to the ongoing research project: *The public markets revitalisation strategy with the use of the social catalyst entrepreneurship method, brand repositioning and placemaking as a tool for local development policy* [1], which concerned the regeneration of urban markets, the authors present the educational benefits of using the participatory design methodology in university courses. First, is discussed the overall goal of the project conducted within the framework of the national research and development programme - GOSPOSTRATEG [2], in which students were invited to participate. Then, is considered the changing socio-economic environment in which newly graduating architects are required to work in the social context of urban markets in Poland. Finally, the authors focus on the specific methods applied in the participatory process and their impact on improving the social competencies of students.

### EXPERIMENTAL STUDY COURSE CONTEXT AND GOSPOSTRATEG

In 2019, two groups of students from the FA-GUT, were invited to participate in student workshops focusing on the revitalisation of a marketplace in Gdańsk, Poland. The workshops were an optional element of the curriculum, taking the form of seminars and design studios. One group of students was enrolled in the Spatial Management course, while the second group was enrolled in the Architecture specialisation course. The interdisciplinary student workshops were, as stated above, carried out within the framework of the GOSPOSTRATEG programme [2].

The teaching activity and experiment (experimental course) conducted in relation to the elective seminars within the GOSPOSTRATEG research project consisted of a series of lectures, meetings, discussions, study visits and finally design workshops, implemented by academic and non-academic partner institutions: Gdańsk University of Technology, L'Aquila University, Sapienza University of Rome (as academic partners) and a non-governmental organisation (NGO): the City Initiative Association (as a non-academic institution). The main aims/topics of the experimental course were to discover the identity of the district (by *Jane's Walk/Market Walk - Local Identity Walking through Gdańsk-Oliwa* - a preparatory workshop with city walking tours towards community-based city building) and to design the market space experiences (by participatory design within *Market Places/Social Spaces - Revitalisation of Traditional Market Areas through an Integrated Approach to Urban and Architectural Planning* design workshop as a separate seminar). The main goal of the optional GUT seminars was to implement an effective method of education: research by design practice and to integrate Master degree students into research tasks. In Poland, the scientific and

research aspect of architectural education and, in particular, the involvement of Master students into research is imposed by the law for general academic studies, as well as the educational standards for the profession of architect [3][4].

The research GOSPOSTRATEG project: *The public markets revitalisation strategy with use of the social catalyst entrepreneurship method, brand repositioning and placemaking as a tool for local development policy* [1] identifies local problems and fosters the regeneration of local markets, with joint activities combining urban, artistic and cultural development, and the revitalisation of public spaces. It has been implemented by a consortium of three institutions: the City Initiative Association, the Academy of Fine Arts in Gdańsk and Gdańsk University of Technology. This GOSPOSTRATEG project will span over three and a half years, between 2019 and 2022. It is expected that considerable experience should be gained, as well as numerous examples of good practice shared that relate to the regeneration of marketplaces based on the pilot project implemented in Gdańsk-Oliwa.

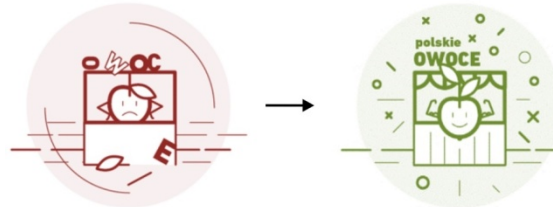


Figure 1: Promotional graphics for the market regeneration project, 2018 (Drawings by A. Świerzewski, GOSPOSTRATEG project research team).

The aim of the research project is to increase the efficiency of development plans for public market areas through an integrated approach to urban and socio-economic planning, based on a bottom-up participatory scheme. Despite their importance for the local economy, traditional marketplaces are unable to compete with chain-stores and shopping centres, and in effect become unsustainable. This project seeks to address the issue of marginalisation of traditional market spaces. The objectives of the project are to increase the safety, attractiveness and competitiveness of traditional market spaces through the processes of placemaking and urban rebranding.

The overall goal of the project is to create an operational strategy for the regeneration of public markets in Poland, and a marketplace in Gdańsk is used as a case study. One of the project's assumptions is that in order to achieve a socio-economic improvement in markets, a holistic approach is required that takes into consideration the social, economic and physical aspects of markets.

The project team consists of members of the FA-GUT, the Academy of Fine Arts in Gdańsk and the City Initiative Association (*InicjatywaMiasto*) - an NGO. Over a six-month period, the team conducted a desktop study into urban markets in the European context and an in-depth field analysis of the selected marketplace in Gdańsk. The study focused partly on the spatial organisation, visual identification and mode of operation of the market, followed by eight months of designing and developing models and strategies to be implemented and tested over the following 24 months. Design research and participation were at the core of all activities undertaken throughout the project. While redesigning the marketplace was only one of the aspects in the regeneration process, it was inevitably one of the aspects to have the greatest impact on the surroundings and required a design process that took into account the needs and expectations of the future market users. The involvement of students in the design process was seen as an opportunity for hands-on learning experiences, which in architectural education is perceived as not only a very effective method of education, but also a valid way of carrying out research, known as research by design practice [5]. The course was also perceived as an opportunity to develop the social competencies of students, required in their future profession as architects and engineers. On the other hand, the involvement of students in the project gave the professional research team important reference material and a chance to observe their own work from a different perspective.

The project's activities comply with its main assumptions and the goal of the GOSPOSTRATEG programme stated as:

*The long-term effect of the program assumes an increase in social capital and wider involvement of Poles in various forms of public activity. As a consequence, important reserves of social energy and agency will be unblocked, so that citizens will be able to actively influence the improvements in their quality of life and the economic condition of the country. The essence of the program is to support the existing knowledge transfer mechanisms and stimulate new ones, strengthening the competitiveness and innovation of the Polish economy. These mechanisms will be based on identified resources and institutions integrating Poland into global knowledge-based value creation networks [2].*

## CHANGING CONTEXT - ARCHITECTURE AS A PROFESSION

The context of architectural production and design of the built environment is constantly changing. The rapid socio-economic changes over the past two decades, as well as those affecting the prevailing urban design paradigm, have had a significant impact on architecture as a profession. Dynamic urban development and the increasing levels of the complexity of cities and buildings drive the need for increased specialisation in architecture and urban planning.

The traditional view of the architect as a professional developing project documentation at the request of investors, and then coordinating the building process has ceased to apply in the contemporary socio-economic reality. Architects are becoming more involved in the complex regeneration processes of urban spaces rather than creating new buildings. Currently, revitalisation is the main and most significant activity taking place in cities. Therefore, the education of future architects should also incorporate these changes [6][7].

Nowadays, architects are involved in a much broader range of issues. They work as participants in planning and developing regional policies, as administration officials, policy negotiators, investment managers and social activists. Professional engagement in any of the above roles requires the architect, apart from having the necessary technical qualifications, to display a high level of social competencies. This changing perception of the architectural profession is widely debated across academia [8-11].

Social competence is a special requirement in the urban regeneration process. This process is not only about designing new functional and aesthetically satisfying spaces, but mostly about facilitating social change in areas with social and economic problems. Achieving this requires co-operation with the local community, as well as a real and authentic engagement and understanding of its problems, which is impossible without direct contact with people from the community. This is why future architects who intend to participate in revitalisation or regeneration need to have special social competencies, such as negotiation skills, empathy and the ability to diagnose the social needs of others. The need for including social competencies in academic education is widely recognised within the European education system, based on the learning outcomes framework, as defined by the European Union:

*Learning outcomes state what a learner is expected to know, be able to do and understand at the end of a learning process or sequence [12].*

So, the learning outcomes framework is a set of statements describing the knowledge, value or ability of a student expected at the completion of a study unit. This framework has been formally adopted by the Polish Qualifications Framework [13]. It changes the way one understands education. The student's education is no longer a knowledge-oriented process, in which teachers merely pass their knowledge to the student. It is a much more complex process in which students and teachers work together to develop a predefined set of skills for the students, as well as their social understanding of the future profession and its values [14].

It is also important for the teacher to create an environment that stimulates students and helps them to achieve such learning outcomes as creativity and curiosity, which are highly desirable in the architectural profession [15]. One of the most significant challenges in formal education is the creation of such an environment. In the authors' opinion, the best way to achieve this is to allow the student's participation in a real-life activity, in this case the engagement in (re)designing an urban market in Gdańsk, conducted as part of its wider regeneration.

## SOCIAL CONTEXT OF PUBLIC MARKETS IN POLAND

Public markets are important nodes in the system of public space within contemporary cities. They are one of the defining elements of cities as they are traditionally understood. In Poland, markets are part of the public domain. One of the tasks of local authorities, according to Polish legislation, is to maintain public markets and make them accessible to the public. In the case of Polish markets, although their number is not declining and their economic situation remain stable, their standard, size and profits are falling [16].

This situation is completely different in Western Europe, where markets are seen not only as spaces for retail, but also cultural activities. Public markets play an important role in the socio-economic structure of contemporary cities.

*Marketplaces are the original business incubators; as an accessible open workspace they offer a unique, low-risk opportunity for people to test business ideas and learn new skills [17].*

A good example is London's experience in the management of markets which show a massive social potential. The number of London markets have increased from 163 to 280 since 2010, playing a major role in the local economy and as important culture-building elements through a variety of food-oriented businesses. This was possible because of the changing understanding of the market's role in the contemporary city, as well as that of the market communities. Cities, neighbourhoods, public spaces, as well as public markets became brands [18]. Public markets in Europe, especially when seen in comparison to supermarkets and malls, are not only spaces where one acquires a product, but is also offered an experience: a culinary experience or local community building factor. This shift forces markets to reinvent what they offer, as well as their public image.

*Technological, social and economic changes, particularly in relation to the way people want to shop, are forcing markets to rethink the way they operate [17].*

However, local market communities undervalue the overall importance of the customer experience and the impact of their image on the condition of their businesses. According to a study conducted in London, just changing the image of shopping streets resulted in an increase of the sales of agricultural products by 30-40% [19].

Focus interviews proved that market communities did not realise that potential. Although there is no current research on the impact of an image change on sales in public markets, the above results suggest that implementing changes to the image of public markets may have a similar effect in the Polish socio-economic reality. Facilitating that change is impossible without raising the awareness in the local community of the potential social and economic benefits that derive from improving the customer experience. This change, in turn, requires a participatory process of consultations and discussions. The students' involvement plays an important part in this process.

## PARTICIPATORY DESIGN

The goal of the GOSPOSTRATEG project is to develop tools to redevelop markets in Poland to help them become economically stable social centres of the local community.

With regard to this project, the role of the GUT team, with the participation of students, was to research and diagnose the spatial condition of a case study market and to develop guidelines for its regeneration. The process comprised research conducted in parallel by two teams of professionals and students. Both teams were in direct contact with the market community through participatory workshops and field study visits.

The case study marketplace in Gdańsk is managed by a local association of traders (*Stowarzyszenie Kupców Polanki*) who lease the marketplace from the city for a defined amount of time. Alongside the day-to-day operations of the market, the manager is also responsible for regular maintenance of the marketplace, including necessary modernisations and renovations, according to the official municipal guidelines.

For the past decade, the income from the market, as well as the number of traders and customers, has been in steady decline and the space has been slowly deteriorating. The prime location of the marketplace, in the centre of a dynamically developing neighbourhood and close to many tourist attractions offers huge potential, but it is under threat. If the current manager is unable to comply with the terms of tenancy included in the lease agreement, the city will not renew the lease and the current users will effectively be evicted.

Based on the desktop research and preliminary exploration of the site conducted at the inception of the project, the researchers singled out three main fields that required improvement, to form part of the overall regeneration process: spatial and functional organisation, public image and management of the marketplace. In order to achieve the objectives of the project the decision was made to closely involve the market community in all stages of the project.

The participation of the traders either took the form of informal meetings, during which ongoing affairs were discussed and trust between the involved parties was established or through workshops in which the traders were asked to actively participate in finding new solutions for their marketplace and to share their concerns.

The students' role was to observe and assist the researchers in these activities and, significantly, to actively engage in special professional participatory workshops as part of the GOSPOSTRATEG project.

The aim of the participatory workshops was twofold: to find the best design solutions for the market, and to improve awareness among the market community and educate them in subjects that would benefit their business. In total six professional workshops were conducted in the period between April and October 2019:

- One workshop concerned with understanding the relationship between the traders and the changes that would occur in the marketplace as part of the regeneration process, in particular their fears and worries.
- One workshop dedicated to issues related to the structure and management of the market.
- One workshop dedicated to issues related to the physical design of the market.
- Three workshops dedicated to marketing and social issues, which were identified as the fields in which the traders had the least competence.



Figure 2: Professional participatory workshops in physical design, GOSPOSTRATEG project, April 2019 (Photographs by J. Borucka).



Regarding the physical design workshop, the participants were asked to identify the main spatial problems in the marketplace. To support the participants and to aid the *imagining* process, a model of the marketplace was prepared with movable elements as indicators to existing problems and possible solutions (Figure 2).

The findings of the workshop formed a basis for the design guidelines concerning the new spatial layout of the marketplace. The students also worked on their new interpretation of the market, but were given much more flexible design limits. Their role was to create a vision that could become a reference point for the professional project.

Thus, as an addition, several creative student meetings with the market community and beneficiary of the project were conducted. This involvement of students took place through a specially organised experimental course at the GUT related to the marketplace in the Gdańsk-Oliwa district under the GOSPOSTRATEG project. It included a series of workshops for architecture and spatial planning students, such as the already mentioned, - preparatory, participatory workshop *Jane's Walk/Market Walk* and the design workshop *Marketplaces/Social Spaces*.

The *Jane's Walk/Market Walk - Local Identity Walking through Gdańsk-Oliwa* preparatory workshop and the city walking tours towards community-based city building were aimed at interpreting the identity of the district.

This workshop formed an initial part of the experimental course conducted in May 2019 in preparation for the optional seminar, in June 2019. The educational activity also formed part of the global Jane's Walk - an international initiative launched in 2007 in Toronto to organise open city walks. The Jane's Walk global walking tour was inspired by Jane Jacobs. The direct inspiration was the attitude of this American-Canadian activist and author of the revolutionary book *The Death and Life of Great American Cities* [20]. Jacobs was a supporter of cities organised on a human scale, where the priority was easily accessible common spaces that were conducive to walking, as a place for the integration and activation of residents [20]. Therefore, Jane's Walk - walks organised around the world at the beginning of May on the anniversary of Jane Jacobs' birth, are intended to encourage city dwellers to experience their surroundings subjectively and to rediscover them in a creative and engaged way. Joint discussions and observations not only integrate, but often also lead to the improvement of the everyday living environment [21].

The walk was organised as one of the course tasks for students of spatial development with the support of students of architecture. The 2019 version of Jane's Walk in Gdańsk took place on 18 May. The students invited participants to stroll around Oliwa, to look at the district from a different perspective, to seek local identity and the centre of the district. During the walk many stops were made, including in Oliwa Park, at Oliwa Cathedral and in the market, a place full of life two days a week (Figure 3).

The activities on the walk were prepared by a group of students from the FA-GUT, Master studies in Spatial Management, as part of the participatory planning classes. The walk was one of the final practical tasks for the course, and was organised under the supervision of faculty staff, a representative from the City Initiative Association, and in co-operation with the National Museum in Gdańsk, Ethnography Branch (Opacki Granary) and the *Polanki* Traders Association. Local residents, local associations and experts have also made a fundamental contribution to the knowledge of the district.

The main topic of Jane' Walk 2019 prompted reflection during which the participants attempted to view the Gdańsk-Oliwa district from a different perspective and to discover the local identities of the district. It created the opportunity to encounter and achieve the collective consideration of the role of the marketplace as the centre of the district.

For the students, it also created a solid theoretical and practical base for the participatory design activities [22][23].



Figure 3: Student preparatory, participatory workshop *Jane's Walk/Market Walk* within the participatory planning course, for Master students, GUT, May 2019 (Photographs by J. Borucka).

The follow up experimental educational activity was the participatory design workshop conducted in June 2019 within the optional seminar: *Marketplaces/Social Spaces - Revitalisation of Traditional Market Areas through an Integrated Approach to Urban and Architectural planning - Polanki Marketplace in Gdańsk-Oliwa*. The main aim of the

participatory workshop was to design the market space experiences by implementing a conceptual study (creative solutions) related to the revitalisation of a small marketplace. The goal of the course was the theoretical and practical familiarisation of the student with the problems related to the revitalisation of traditional market areas through an integrated approach to urban and architectural planning in connection with public participation.

The course was organised in the form of a block (one-week) seminar and workshop. It concerned the preparation and implementation of creative concepts in public spaces (urban solutions and architectural interventions) related to the issue. It was planned as interdisciplinary group work. Around 30 students were divided into small groups, each working on creative solutions for the *Polanki* marketplace in Gdańsk-Oliwa (Figure 4).



Figure 4: Student participatory, design workshop within the optional seminar *Marketplaces/Social Spaces*, for Master students, GUT, June 2019 (Photographs by J. Borucka and A. Benedetti).

The optional seminar, including the workshop was divided into two parts. The first was a preparatory and theoretical workshop in the interdisciplinary group at the FA-GUT, where students from both the Spatial Planning and Architecture courses developed a comprehensive programme of spatial and architectural ideas for the marketplace area following a series of lectures given by faculty staff and a representative from the City Initiative Association.

The second part was dedicated to the development of practical concept ideas to be implemented during the intensive design workshop days and comprised practical urban walks, site visits and workshops, finishing with an exhibition and presentation for the local community. All the work was concluded with a public presentation of the finalised solution and exhibited to the local community during the annual district event, Viva Oliwa.

Significant was the involvement of GUT's international and local partners, who shared their experience on local participatory activities and creative solutions for small marketplaces in the context of integrated revitalisation. The course was co-led by experienced academic staff from L'Aquila University and the FA-GUT. It was also prepared in co-operation with the local community (small local traders and their associations) and supported by the participation of the City Initiative Association, the leader of the GOSPOSTRATEG project.

Both workshops developed the topic of contemporary problems faced by traditional market areas and the solutions of them through an integrated approach to urban and architectural planning. The students realised the need to design public spaces and buildings as an integral and continuous part of the built environment, including public spaces and their transformation in the context of social participation and the revitalisation of public space.

One important educational aspect of the involvement in the experimental course was the opportunity for the students to work according to the placemaking method. The placemaking method, developed by the Project for Public Spaces, proposes a new route to understanding public spaces: as a net of spatial, social and cultural relations creating the unique quality of *place* [24].

A place is a space with which the local community easily identifies. *Placemaking* is a transformation that emphasises the identity aspects and integration into the designed space. This activity is as much an engineering activity related to the transformation of space as it is a cultural activity related to public space animation. An important aspect of working according to the method is its participatory aspect. Placemaking, therefore, is characterised by a comprehensive approach that includes design, programming and management of public space, as well as direct contact with representatives of the local community.

## CONCLUSIONS

An important result of the workshops, with regard to the participating students, was the change in their understating of their role as a designer. They were not designing architectural space, but a *place*. They were participating in real consultations, which allowed them to delve into the complexities of the socio-economic changes of regeneration. All of that have had an impact on the students' development. It was an excellent opportunity to play an active role in this type

of activity and acquire the real-life experience needed to develop the social competencies stated in architecture study programmes, such as being:

- able to respect the diversity of views and cultures and to show sensitivity to the social aspects of the profession.
- ready to take responsibility for humanistic, social, cultural, architectural and urban values in environmental and cultural heritage protection.
- able to explain the need to use knowledge of the humanities or social, economic or legal sciences in the functioning of a social environment.

What is more, the students' engagement in the implementation of a participatory design and research project raised their awareness of practice-based professional activities and scientific aspects in education, which is a good fit with the recently implemented standards of education in Poland in relation to the profession of architect [3][4].

As Nyka et al point out:

*In the discipline of architecture, hands-on experiences are associated not only with one of the most effective methods of education, but also with a particular way of carrying out research, within so-called research by design practice. Since many schools worldwide are obliged to integrate Master degree students into research tasks, the research by design concept is receiving growing attention in architectural curricula [5].*

The real-life experience of students participating in enterprises, as presented here, seems to be crucial in attaining high levels of social competencies. This is even more important in the context of the changing role of the architectural profession in the contemporary complex reality. Thus, there is a strong need to adapt architectural education to meet all these challenges in professional practice.

#### ACKNOWLEDGMENT

The GOSPOSTRATEG programme is financed by the National Centre for Research and Development in Poland.

#### REFERENCES

1. Inicjatywa Miasto. Społeczny Katalizator Przedsiębiorczości Strategia Rewitalizacji Obiektów Handlu Targowego z Wykorzystaniem Metody Społecznego Katalizatora Przedsiębiorczości, Repozycjonowania Marki oraz Placemakingu Jako Narzędzie Polityki Rozwoju Lokalnego (2020), 7 July 2020, <http://inicjatywamiasto.pl/portfolio/spoleczny-katalizator-przedsiębiorczosci/> (in Polish).
2. Narodowe Centrum Badań i Rozwoju. Społeczny i Gospodarczy Rozwój Polski w Warunkach Globalizujących się Rynków - GOSPOSTRATEG (2021) 7 July 2020, <https://www.ncbr.gov.pl/programy/programy-strategiczne/gospostrateg/> (in Polish).
3. Prawo o Szkolnictwie Wyższym i Nauce (Dz. U. poz. 1668, z późn. zm. 3), 22 July 2019, <http://prawo.sejm.gov.pl/isap.nsf/download.xsp/WDU20190001359/O/D20191359.pdf> (in Polish).
4. Zarządzenie Rektora Politechniki Gdańskiej nr 11/2019 z 30 Kwietnia 2019 r. w sprawie: Ustalenia Zasad Tworzenia, Prowadzenia i Likwidacji Kierunków Studiów na Politechnice Gdańskiej. Na podstawie Art. 23 Ust. 2, Pkt 8 Ustawy z dnia 20 Lipca 2018 r. Prawo o Szkolnictwie Wyższym i Nauce (Dz. U. 2018, poz. 1668) <https://pg.edu.pl/documents/10754/d50b6af2-08a3-4558-ad00-7c0e0224534b> (in Polish).
5. Nyka, L., Cudzik, J. and Urbanowicz, K., The CDIO model in architectural education and research by design. *World Trans. on Engng. and Technol. Educ.*, 18, 2, 85-90 (2020).
6. Szczepański, J., Sustainable monument preservation in architectural education. *World Trans. on Engng. and Technol. Educ.*, 17, 1, 42-47 (2019).
7. Kwasek, M. and Piwek, A., Supporting study tours in the teaching of architectural heritage. *World Trans. on Engng. and Technol. Educ.*, 18, 4, 479-484 (2020).
8. Spiridonidis, C., Voyatzaki, M. and Meiss von, P. (Eds), New responsibilities of schools of architecture preparing graduates for a sustainable career in architecture. *Proc. 11th Meeting of Heads of European Schools of Architecture*, Thessaloniki, Greece, September 2009, EAAE, Charis Ltd, Thessaloniki, Greece (2009).
9. Spiridonidis, C. and Voyatzaki, M. (Eds), Learning for the future, new priorities of schools of architecture in the era of uncertainty. *Proc. ENHSA*, EAAE, Greece (2011).
10. European Association for Architectural Education (EAAE), 7 March 2020, <http://www.eaae.be>
11. Borucka, J. and Macikowski, B., Teaching Architecture - contemporary challenges and threats in the complexity of built environment. *IOP Conference Series: Materials Science and Engineering*, IOP Publishing, 245, **082058**, 1-12 (2017).
12. Cedefop - European Centre for the Development of Vocational Training, Defining, Writing and Applying Learning Outcomes: a European Handbook. Luxembourg: Publications Office (2017).
13. The Polish Qualifications Framework (PQF), 2 March 2020, <http://www.infor.pl/akt-prawny/DZU.2016.008.0000064,ustawa-o-zintegrowanym-systemie-kwalifikacji.html>
14. Savic, M. and Kashef, M., Learning outcomes in affective domain within contemporary architectural curricula. *Inter. J. Technol. and Design Educ.*, 23, 4, 987-1004 (2013).
15. Pusca, D. and Northwood, O.D., Curiosity, creativity and engineering education. *Global J. of Engng. Educ.*, 20, 3, 152-158 (2018).

16. Bieszk-Stolorz, B. and Felsztyńska, I., Analiza atrakcyjności dużych miast pod względem rozwoju handlu targowiskowego, *Studia i Prace WNEiS US*, 54, 3, 407-419 (2018) (in Polish).
17. Mayor of London. Understanding London's Markets. London: Greater London Authority City Hall, (2017). 14 July 2020, [https://www.london.gov.uk/sites/default/files/20171219\\_gla\\_markets\\_report\\_short\\_web.pdf](https://www.london.gov.uk/sites/default/files/20171219_gla_markets_report_short_web.pdf)
18. Bennett, R. and Savani, S., The rebranding of city places: an international comparative investigation. *Inter. Public Manage. Review*, 4, 2, 70-87 (2003).
19. Lawlor, E., The Pedestrian Pound. The Business Case for Better Streets and Places. London: Living Streets, (2013). 5 May 2020, <https://www.livingstreets.org.uk/media/3890/pedestrian-pound-2018.pdf>
20. Jacobs, J., *The Death and Life of Great American Cities*. New York: Modern Library (1961) (1993).
21. Jane's Walk Annual Festival (2021), 10 June 2020, <https://janeswalk.org>
22. Borucka, J. and Wróblewska, M., *The Urban Walk Architecture Talk - Bridging Socially Engaged Art, Urban Processes, and Cultural Development*. In: Stratigea, A. and Kavroudakis, D. (Eds), *Mediterranean Cities and Island Communities Smart, Sustainable, Inclusive and Resilient*. Cham: Springer, 113-133 (2018).
23. Borucka, J., City walk: a didactic innovative experiment in architectural education. *World Trans. on Engng. and Technol. Educ.*, 17, 2, 158-163 (2019).
24. Whyte, W.H., *The Social Life of Small Urban Spaces*. (2nd Edn), New York: Project for Public Spaces (2013).