



Erasmus+

**KA220-HED - Cooperation partnerships
in higher education
(KA220-HED)**

PROJECT NUMBER: 2023-1-EL01-KA220-HED-000164728

Project acronym: **DEMo4PPL**

Project full title: **Digital Education Modules 4 Participatory Planning**

DELIVERABLE REPORT



Co-funded by the
Erasmus+ Programme
of the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Deliverable	No.	O.10	Title	Overview of Participatory Planning courses in academic curricula and training programmes at national level in Poland
Workpackage	No.	2	Title	Needs assessment and gap analysis
Activity	No.	2.3	Title	Overview of Participatory Planning courses in academic curricula and training programmes at national level
Date of preparation of this version:			25/04/2024	
Authors:			Marta Nalej, Katarzyna Leńniewska-Napierała, Tomasz Napierała, Tomasz Mikołajczyk, Tadeusz Pupar, University of Lodz	
Status (D: draft; RD: revised draft; F: final):			F	
File Name:			DEMo4PPL-O.10-v3.doc	
Version:			3	

Table of contents

1. Introduction	5
1.1. Project Partner overview	5
1.2. Academic area of interest	5
1.3. Academic and educational area of interest in relation to Participatory Planning teaching.....	6
2. Methodology.....	7
2.1. Introduction.....	7
2.2. Selection of the programmes on planning	7
2.3. Desk research.....	8
2.4. Interviews	9
2.5. Survey.....	10
3. The state of the art of planning education in Poland.....	10
4. Overview of how Participatory Planning is intended and taught in Polish academic programmes.....	12
4.1. Introduction.....	12
4.2. Courses	14
4.3. Contents: how is Participatory Planning intended within the courses?	16
4.4. Methods: how is Participatory Planning taught?	18
4.5. Digital participatory planning tools.....	18
5. Good practices on participatory planning education and training.....	20
5.1. Major strengths and weaknesses in participatory planning teaching	20
5.2. Review of good practices on participatory planning education	21
5.2.1. Example I – ‘Locals talking - panel discussions’ during ‘SPOT - Sustainable Spatial Planning of Tourism Destinations’ under Erasmus+ Programme, University of Lodz.....	21
5.2.2. Example II – Course on ‘GIS in social participation’ – Adam Mickiewicz University in Poznań.....	22
5.2.3. Example III – Participatory Budget ‘wspUłrządzimy’ at the University of Lodz	23
5.2.4. Example IV – the Local Government Spatial Data Platform offered by GIAP.....	23
5.2.5. Example V - Form of completing the course ‘Social participation in spatial planning’ at the Faculty of Geographical Sciences (University of Lodz).....	24
6. Common needs and gaps.....	25
7. References.....	26
8. Annexes.....	29

8.1.	Annex I – List of programmes on “ <i>Spatial planning/spatial management</i> ” in Poland	29
8.2.	Annex II – Interview protocols	31
8.3.	Annex III – List of interviewees	31
8.4.	Annex IV – Survey structure and results	33

List of Figures

Figure 1.	The organisation of the data set in RAD-on system	8
Figure 2.	The search directory in the USOS system of the University of Lodz	9
Figure 3.	The number of ‘spatial economy’ curricula in Poland in 2024 according to the university profile.....	11
Figure 4.	The number of ‘spatial economy’ curricula in Poland according to the ISCED framework in 2024	12
Figure 5.	The students' opinion if the curricula deal with participatory planning (N=76)	13
Figure 6.	The students' opinion on how the programs approach participatory planning (N=76).....	14
Figure 7.	The students' understanding of the knowledge, competencies, and skills related to participatory planning (N=76)	16
Figure 8.	The students' understanding of the knowledge of concrete cases related to participatory planning (N=76)	17
Figure 9.	The students' understanding of digital tools related to participatory planning (N=76).....	19
Figure 10.	The students’ with work experience opinion on participatory planning tools in practice (N=21)	20
Figure 11.	Locals talking in Langhe-Roero and Monferrato (Italy) in 2022	22
Figure 12.	The example of playground design from the potential task for the participatory budget of the city of Lodz	25
Figure 13.	The students' opinion on need for additional courses related with participatory planning (N=76)	26

List of Tables

Table 1.	The list of curricula related to spatial planning at the University of Lodz	7
Table 2.	Social participation courses implemented in spatial planning curricula in Poland in 2023/24 academic year.....	14
Table 3.	Major strengths and weaknesses in participatory planning teaching in Poland.....	20

Revision History

Version No.	Date	Comment (if needed)
1	03/04/2024	
2	10/04/2024	
3	25/04/2024	

Reviewers list

Name	Institution	Date
Erblin Berisha	Politecnico di Torino	09/04/2024
Mariya Stoycheva,	Varna University of Management	19/04/2024

List of abbreviations

Abbreviation:	Definition
DEMo4PPL	Digital Education Modules 4 Participatory Planning
ECTS	European Credit Transfer and Accumulation System
GIS	Geographic Information System
ISCED	International Standard Classification of Education
LULC	Land Use and Land Cover
MSCA	"Maria Skłodowska-Curie" activities
PKA	The Polish Accreditation Committee
PPL	Participatory planning
SPOT	Sustainable Spatial Planning of Tourism Destinations
UNIC	European University of Post-Industrial Cities
USOS	University Study-Oriented System

1. Introduction

The activity called ‘*Overview of Participatory Planning courses in academic curricula and training programmes at national level*’ is part of the Work Package no. 2 named ‘*Needs assessment and gap analysis*’ which aims: 1) to gain an increased and comprehensive understanding of participatory planning courses in academic curricula and training programmes at national level in partners’ countries, 2) to identify good practices in participating countries. The overall purpose is to use all acquired information to identify specific needs, gaps, and goals in each country, as well as to identify common needs and set common objectives. In this report the situation in Poland was presented.

1.1. Project Partner overview

University of Lodz, established in 1945, is one of the leading public universities in Poland. For decades it has been one of the biggest and most popular Polish universities and is repeatedly ranked among the top higher education institutions in the country. The 13 faculties offer 164 fields of study and 151 specialisations. In addition, the University offers several doctoral programmes in 4 doctoral schools and 50 postgraduate study programmes. University of Lodz educates about 24,000 students, including about 3,000 foreign students on full cycles and as part of exchange programmes. University treats international cooperation to foster its development and continue city’s tradition. Based on bilateral agreements, University of Lodz cooperates with approx. 190 partner institutions from all over the world. University of Lodz takes part in other exchange and research programmes such as Erasmus+ (over 1,000 agreements with 400 partner institutions), Erasmus Mundus and MSCA. In 2022 University of Lodz joined European University of Post-Industrial Cities (UNIC).

1.2. Academic area of interest

The first geographical unit functioned in the structure of the University of Lodz from May 1945 as a part of the Faculty of Mathematics and Natural Sciences. In 1951, the Faculty of Biology and Earth Sciences was established at the University of Lodz by separating biological and geographical units. For 50 years, Lodz’s geography has been developing within this Faculty. The increase in the number of researchers and students were the basis for establishing the Faculty of Geographical Sciences in 2001.

Scientific research at the Faculty of Geographical Sciences is conducted in the field of both physical geography and socio-economic geography, mainly:

- physical geography (e.g., geomorphology, geology, hydrology, meteorology, soil science),
- social and human geography,
- built environment and spatial policy,
- urban geography,
- tourism and leisure studies,
- geoinformation and GIS,
- political and historical geography,
- regional studies,
- spatial management and spatial planning,
- geography education.

However, DEMo4PPL team members are interested in: 1) social aspects of spatial planning, 2) spatial planning instruments, 3) social participation, 4) rural development, 5) sustainable tourism development, 6) geographical factors determining hotel decisions and performances, 7) GIS, 8) machine learning, 9) LULC spatial analyses, 10) landscape analyses.

The Faculty of Geographical Sciences offers study programmes and courses in cooperation with professionals and practitioners in a field of every curriculum. Moreover, the Faculty of Geographical Sciences provides the following study programmes: 1) Geography (bachelor & master), 2) Geoinformation (bachelor & master), 3) GIS analyst (postgraduate studies), 4) Geomonitoring (bachelor), 5) Tourism and recreation (bachelor), 6) Sustainable tourism (master), 7) Spatial economy (bachelor & engineering), 8) Planning and organization of space (master).

1.3. Academic and educational area of interest in relation to Participatory Planning teaching

At the University of Lodz participatory planning issues are assigned to various disciplines, including geography, economy, urban planning, environmental studies, social sciences, public administration, or community development. The academic staff is involved in different initiatives connected with participatory planning:

- 1. Courses and Programmes** – the University of Lodz offers specialized courses that focus on social participation, e.g. *Social activation and participation* at the Faculty of Biology and Environmental Protection; *Deliberation, participation, cooperation, Social participation or Social Participation in Planning and Formation of Urban Spaces* at the Faculty of Economics and Sociology, *Participation and Social Communication* at the Faculty of Management, *Social Participation in Spatial Planning* at the Faculty of Geographical Sciences.
- 2. Research Initiatives** – the examples of the research issues which were investigated by academic staff represented University of Lodz are mostly connected with participatory instruments for the management of local government units (Boryczka 2015, Kikosicka 2014, Grzyś 2021), and participatory budget in urban and rural areas (Leśniewska-Napierała 2017, Leśniewska-Napierała & Napierała 2020, Leśniewska-Napierała & Mikołajczyk 2022, Hughes et al. 2023, Brzeziński 2017, Bernacik et al. 2017, Mikołajczyk 2023).
- 3. Collaboration with Local Communities** - the Faculty of Geographical Sciences regularly undertakes collaborative initiatives aimed at increasing stakeholder involvement in spatial planning, e.g., expert opinions on: *Perspectives of changes in the spatial development of the palace and park complex in Bratoszewice in the Stryków municipality* (2017), *Diagnosis of the state of spatial development of the area covered by the social program 'East of Śródmieście'* or *Assessment of the functioning and accessibility of commercial establishments in the rural commune of Brzeziny*.

Studies at the University of Lodz in the field of spatial planning allow to obtain knowledge and skills related to spatial organisation of socio-economic development and interdisciplinary (geographical, economic, natural, social, and technical) knowledge on the management of a space. At the University of Lodz 6 curricula are directly related to the spatial planning (Table 1).

Table 1. The list of curricula related to spatial planning at the University of Lodz

Curriculum	Faculty	Level	Profile	Number of ECTS	Number of semesters
Spatial economy	Faculty of Geographical Sciences	Bachelor	academic	180	6
Spatial economy	Faculty of Economics and Sociology	Bachelor	practical	180	6
Spatial economy	Faculty of Geographical Sciences	Engineering	academic	210	7
Planning and organization of space	Faculty of Geographical Sciences	Master	academic	120	4
Planning and organization of space	Faculty of Geographical Sciences	Master	academic	90	3
Spatial economy	Faculty of Economics and Sociology	Master	academic	120	4

Source: own elaboration.

2. Methodology

2.1. Introduction

The *Law on Higher Education and Science*¹ (2018), is the main legal framework which regulates the activities of all public and private universities in Poland. Every university is also bound by legal acts of the Council of Ministers and the Minister of Science and Higher Education. Any higher education institution is obliged to monitor legal changes: amendments to acts and frequently issued ministerial regulations, orders, and announcements, which have a decisive impact on the everyday functioning of a university. The structure of a university, the division of powers of the authorities, matters related to teaching and many other issues are regulated by a university's internal regulations, including statute or study regulations.

2.2. Selection of the programmes on planning

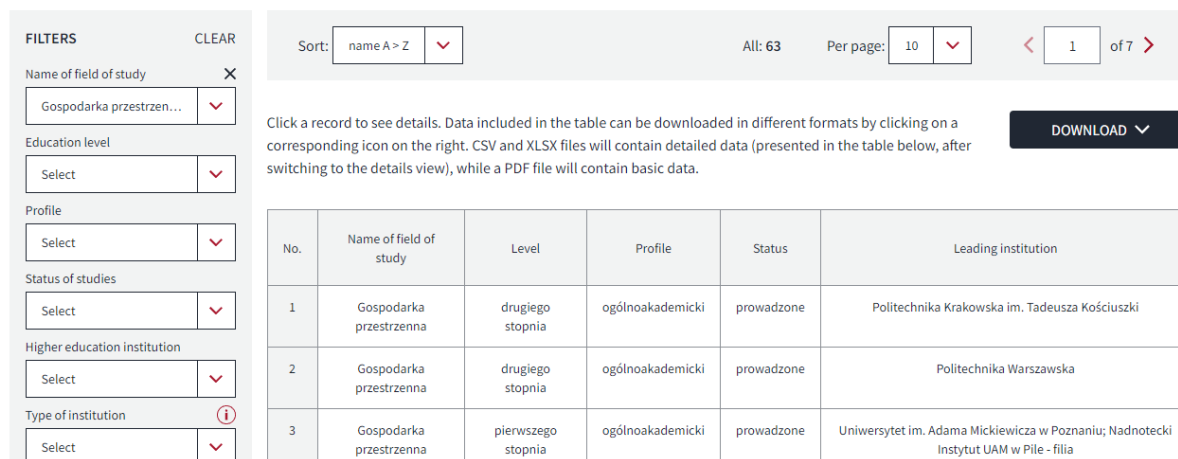
The selection of the spatial planning programmes for further investigation has been made based on the official database of RAD-on. The RAD-on system² is part of the Integrated Network of Information on Science and Higher Education, which is the largest public system in Poland in terms of the scope of collected data. It supports the Ministry of Science and Higher Education and other state agencies in shaping scientific policy. RAD-on provides reports, analyses, and data on higher education and science in Poland obtained from trusted sources. The data set called 'Higher education provided in a given field of study' was filtered by the 'Name of field of study' as 'spatial planning/management,' resulting in 64 entries at different levels of studies (Fig. 1).

¹ <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20180001668> [Accessed on 16.02.2024]

² <https://radon.nauka.gov.pl/dane/> [Accessed on 16.02.2024]

HIGHER EDUCATION PROVIDED IN A GIVEN FIELD OF STUDY

The list contains public data of the fields of study provided by the institutions of the higher education and science system in Poland. The data come from the POL-on integrated system of information on science and higher education and are updated once a day (at night) - the list reflects the state of the POL-on data from the previous day. Legal basis: Act of 20 July 2018 on Higher Education and Science.



The screenshot shows the RAD-on system interface. On the left, there are several filter sections: 'Name of field of study' (set to 'Gospodarka przestrzen...'), 'Education level' (set to 'Select'), 'Profile' (set to 'Select'), 'Status of studies' (set to 'Select'), 'Higher education institution' (set to 'Select'), and 'Type of institution' (set to 'Select'). At the top right, there are sorting and pagination options: 'Sort: name A > Z', 'All: 63', 'Per page: 10', and '1 of 7'. A 'DOWNLOAD' button is visible on the right. Below the filters, there is a table with the following data:

No.	Name of field of study	Level	Profile	Status	Leading institution
1	Gospodarka przestrzenna	drugiego stopnia	ogólnoakademicki	prowadzone	Politechnika Krakowska im. Tadeusza Kościuszki
2	Gospodarka przestrzenna	drugiego stopnia	ogólnoakademicki	prowadzone	Politechnika Warszawska
3	Gospodarka przestrzenna	pierwszego stopnia	ogólnoakademicki	prowadzone	Uniwersytet im. Adama Mickiewicza w Poznaniu; Nadnotecki Instytut UAM w Pile - filia

Figure 1. The organisation of the data set in RAD-on system

Source: RAD-on <https://radon.nauka.gov.pl/dane/studia-prowadzone-na-okreslonym-kierunku?pageNumber=2&name=Gospodarka%20przestrzenna&pageSize=50&fieldName=name&sortOrder=ASC> [Accessed on 16.02.2024]

The dataset contains data such as: leading institution, profile of the studies, ISCED (code), level, disciplines, the language of instruction, launch date, number of ECTS etc. After verification of activities in the academic year 2023-24 only 64 curricula left for the further detailed analysis (see Annex I).

2.3. Desk research

Analysis of existing data should precede every research project. It enables the collection and analysis of existing data on the phenomenon under study. Therefore, it allows to determine the current state of information regarding a specific research topic. From the perspective of conducting research, it is a cost- and time-saving activity.

As part of the analysis of existing data, qualitative and quantitative information relating to the studied phenomena was searched in documents such as: programmes' description and study plans at various levels, resolutions of faculty/university boards on curricula of spatial planning/management. The detailed information on study programmes was identified at official university websites, websites of units responsible for the implementation of studies, websites of the Polish Accreditation Commission (PKA), public information bulletins or database of the university's own acts.

The detailed syllabuses of subjects dealing with social participation were downloaded from University Study-Oriented System (USOS) or similar systems. The USOS is a student management information system utilized in nearly 90 universities in Poland, including technical universities, higher vocational institutions, university schools of physical education, and various other types of higher education institutions (Fig. 2).

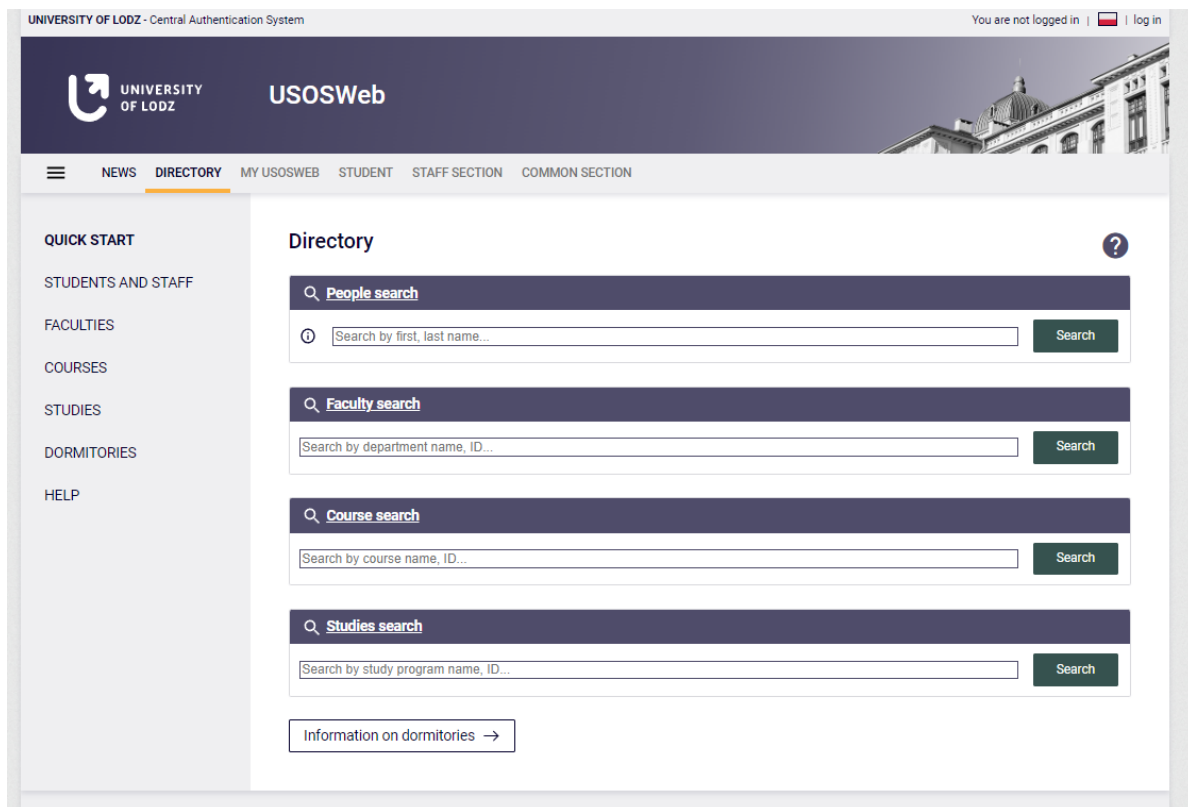


Figure 2. The search directory in the USOS system of the University of Lodz

Source: <https://usosweb.uni.lodz.pl/kontroler.php?action=katalog2/index> [Accessed on 16.02.2024]

The standard course syllabus contains the following data: short description, course content, learning outcomes, teaching methods, criteria of assessment, methods of verification and assessment of the achievement of the learning outcomes, bibliography, and prerequisites.

Moreover, the database of the evaluated higher education institutions, units and programmes provided by The Polish Accreditation Committee (PKA)³ was investigated. The data base contains detailed information about the study programmes which were assessed by PKA, e.g., self-evaluation report, the evaluation report, the university's response to the evaluation report. Due to the PKA rules program evaluation ends with a positive or negative grade. A positive programmes evaluation is issued for a period of up to 6 years.

2.4. Interviews

To identify good practices on participatory planning education and training the interviews with social participation teachers and social participation digital tools providers were conducted. Depending on the respondent, the following questions were considered to be asked:

- What tools do you know (including digital ones) in the field of social participation that are used during social participation or participatory planning courses?
- What kind of tools using for social participation do you present to your students?
- What kind of digital using for social participation do you present to your students?
- Do you know any examples of external events or activities on social participation which are available for the students/practitioners?

³ <https://pka.edu.pl/ocena/baza-uczeln-i-jednostek-i-kierunkow-ocenionych/#> [Access on 16.02.2024]

- What digital tools for social participation do you offer? Do you teach local communities and representatives of municipal offices how to use the offered tools (applications) and how?
- Do you organize the participation process using the offered tools? Or does it remain the responsibility of the commune?
- Do you offer other digital participation training? If so, which ones and who most often participates in them? If not, how do stakeholders gain knowledge about the products you offer?
- Do you promote digital participation? If so, in what way? If not, why? (see Annex II).

The interviews were informal conversations and were recorded or notes were taken during the conversations - if the respondent did not agree to be recorded or when it was not possible to make a recording (see Annex III).

2.5. Survey

The online survey for the university students aimed at collecting information on how public participation and participatory planning are taught in the framework of spatial planning bachelor/engineering and master programmes in Poland. The particular attention was dedicated to the knowledge delivered in relation to both traditional and digital participatory planning tools. The survey was divided into three parts: 1) overall gender issues, 2) general knowledge about PPL and its digital turn, and 3) information concerning the course currently attended and desiderata (see Annex IV).

The student's survey was conducted using MS Forms between 26th February and 8th March 2024 by teachers from the Institute of the Built Environment and Spatial Policy at the Faculty of Geographical Sciences in the University of Lodz. In the research sample included students from 3 different levels of the studies: 1) bachelor, 2) engineering, 3) master provided by the University of Lodz. A total of 76 surveys were conducted, including 51 women, 24 men and 1 non-binary person. All the respondents studied at the University of Lodz and had Polish citizenship and last school qualification they obtained in Poland. 39 respondents studied at bachelor's degree, 14 at engineering and 23 at master level. 21 respondents had already gained work experience in planning-related tasks – including internships.

3. The state of the art of planning education in Poland

Dynamic socio-economic changes in Poland, driven mainly by processes of systemic transformation and European integration, necessitate continuous modernization of educational goals, content, and methods (Rachwał 2021). In the 1990s, the field of study in spatial management, spatial economy, or spatial planning was initiated in Poland through collaborative efforts from representatives of diverse scientific disciplines associated with various universities, including polytechnics, economic universities, natural sciences universities, and pedagogical academies (Fig. 3). The establishment of these fields of study responded to the growing demand for specialists equipped to influence the socio-economic development of territorial units, involving spatial planning and regional development programming (Kobojek 2013, Kudłacz & Zawilińska, 2013). The interdisciplinary nature of the field played a pivotal role, integrating knowledge from various disciplines and facilitating the creation of diverse specializations tailored to the staffing capacities of individual university departments (Kobojek 2013). Spatial management, at its core, involves studying the interrelations and connections among individual elements that shape the functional and spatial structure of specific units (Ślódczyk, Szafranek & Śliwa 2013).

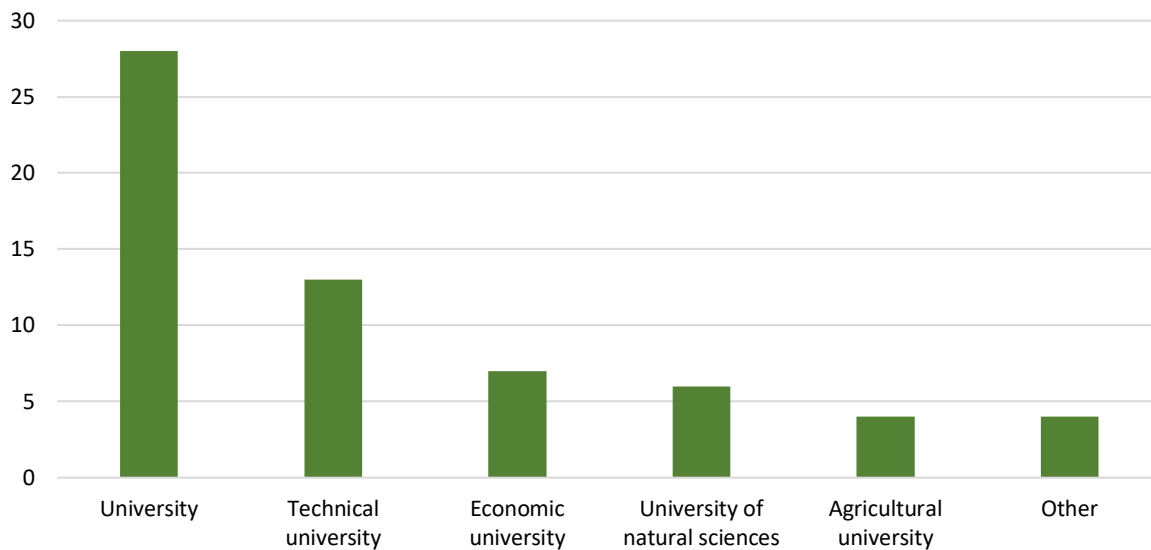


Figure 3. The number of ‘spatial economy’ curricula in Poland in 2024 according to the university profile

Source: own elaboration based on RAD-on <https://radon.nauka.gov.pl/dane/studia-prowadzone-na-okreslonym-kierunku?pageNumber=2&name=Gospodarka%20przestrzenna&pageSize=50&fieldName=name&sortOrder=ASC> [Accessed on 16.02.2024]

In 2018, according to ‘*The regulation of the Minister of Science and Higher Education on fields of science and scientific disciplines and artistic disciplines*’⁴, the discipline called “socio-economic geography and spatial management in the field of social sciences” was defined for the first time in Poland. This is a completely new legal situation, which, on the one hand, provides opportunities for the development of the newly created discipline, including in the field of education, but on the other hand, it poses numerous challenges (Kołodziejczak & Mierzejewska 2021).

There is considerable variation in the study plans and educational programmes in spatial management implemented at universities. The differences are visible both in the number of hours, the structure of subjects, as well as in the share of theoretical and practical classes. Due to Rad-on database provided by Ministry of Science and Higher Education 62 study programmes⁵ on spatial management or similar were provided in academic year 2023/24, including 33 curricula on bachelor or engineering level and 29 master. Due to the regulations of Law on higher education and science, 57 curricula have general academic profile⁶ and only 5 – practical⁷.

⁴ <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20180001818/O/D20181818.pdf> [Access on 09.04.2024]

⁵ See Annex I

⁶ Studies with a general **academic profile** are closely related to the scientific activities of a university. At least half of the classes (more than half of the ECTS credits) must be related to research and scientific publications. This means that every graduate of an academic field is pre-prepared for a scientific career.

⁷ Studies with a **practical profile** are closely related to the practical use of skills and knowledge acquired during classes. At least half of the classes (more than half of the ECTS credits) must develop practical. This means that every graduate of practical studies is pre-prepared to work in a specific profession. Classes should therefore be conducted: 1) in conditions appropriate for a given scope of professional activity, i.e. using studios, laboratories, places of professional practice. A study program with a practical profile must include professional internships: a) 6 months - minimum length in the case of first-cycle studies (bachelor's and engineering studies and long-cycle master's studies; b) 3 months - minimum length in the case of second-cycle master's studies.

Due to the ISCED framework, spatial management curricula in Poland are assigned mainly to “Architecture and town planning”. However, according to the fact that they are run by various types of universities, they are also assigned to: “Earth sciences” (7 curricula), “Engineering, manufacturing and construction, inter-disciplinary programmes” (4), “Economics” (3), “Social and behavioural sciences, not elsewhere classified” (3), and others (see Fig. 4).

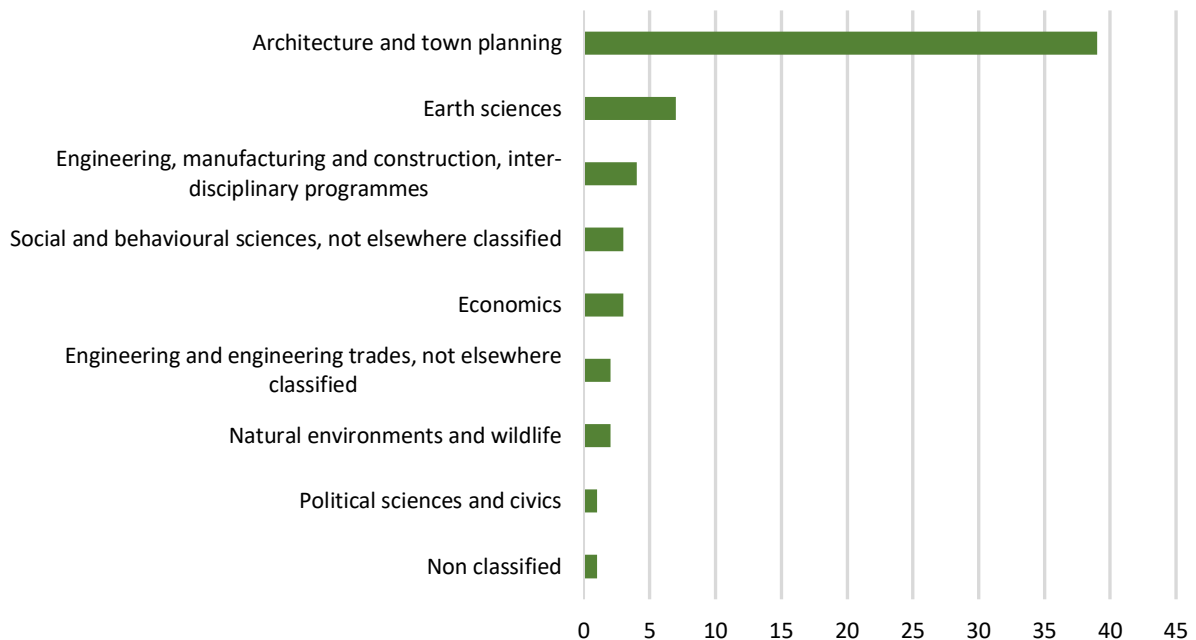


Figure 4. The number of ‘spatial economy’ curricula in Poland according to the ISCED framework in 2024

Source: own elaboration based on RAD-on <https://radon.nauka.gov.pl/dane/studia-prowadzone-na-okreslonym-kierunku?pageNumber=2&name=Gospodarka%20przestrzenna&pageSize=50&fieldName=name&sortOrder=ASC> [Accessed on 16.02.2024]

In conclusion, spatial planning education in Poland typically involves academic programmes at various levels, including bachelor's, engineering, and masters. The focus of these programmes often encompasses spatial planning, urban development, and related disciplines.

4. Overview of how Participatory Planning is intended and taught in Polish academic programmes

4.1. Introduction

Teaching social participation in Poland typically involves a multidisciplinary approach and covers various academic fields such as sociology, community development, urban planning, public policy, social work, and many others. However, among the more than 60 curricula on spatial management offered at Polish universities, only 18 include distinct courses focused on public participation issues.

These courses on participatory planning bear different names and thematic scopes, and among them, we can distinguish the following:

- Participatory planning,
- Social participation in spatial planning,
- Participation and mediation in spatial management,

- Methods of social participation,
- Participation and mediation in spatial conflicts,
- Participation,
- Social participation and elements of mediation,
- Public consultations and negotiation techniques,
- Community-based planning and design - problem based learning,
- GIS in social participation,
- Participatory budget.

Regarding the results of the students' survey, it should be taken into account that almost all participating students come from the Faculty of Geographical Sciences at the University of Lodz. Most students believe that teaching of PPL methods and tools is integrated into the courses. Also a large majority of the respondents think that the basic introduction on participatory planning is provided by the courses (see Fig. 5).

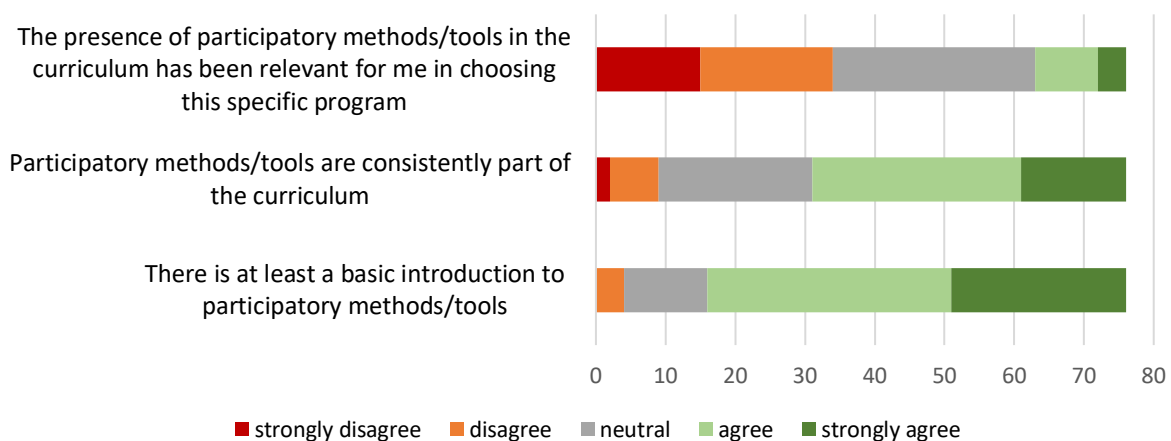


Figure 5. The students' opinion if the curricula deal with participatory planning (N=76)

Source: own elaboration based on surveys.

Separate courses related to social participation appear more often in bachelor or engineering level rather than master study programmes. In the cases when there are no separate courses on social participation, this content is implemented as part of courses related to:

- Fundamentals of spatial planning,
- Spatial planning,
- Spatial planning and city development,
- Designing urban green areas,
- Local spatial development plans,
- Regeneration of urban areas,
- Revitalisation of devastated areas,
- Revitalisation of rural and post-industrial areas,
- Local revitalisation plan,
- Local government in Poland,
- Sociology of housing and cities,
- Shaping public space,
- A leader in an organisation - tools and conditions for effective action,

- Methods of supporting planning decisions,
- The use of GIS in spatial management.

The aforementioned courses include only some aspects of social participation, e.g., the theoretical foundations of social participation, analysis of case studies, general overview of methods and tools used in participatory planning, legal issues of participation in Poland. It goes in line with the student’s opinion (see Fig. 6). Despite differences in study programmes, the content related to social participation was included in all analysed cases. However, there are multiple instances of fragmentary information contained in courses on completely different topics.

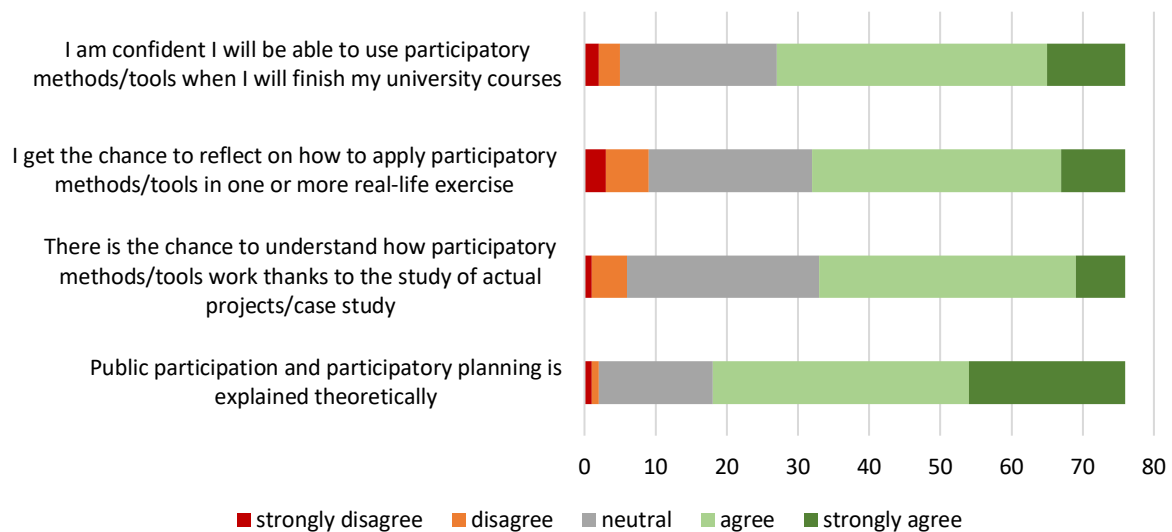


Figure 6. The students' opinion on how the programs approach participatory planning (N=76)

Source: own elaboration based on surveys.

4.2. Courses

As mentioned, the courses on participatory planning bear different names and have different thematic scopes. Among them, we can distinguish the following main topics:

- Participatory planning,
- Public participation and mediation in spatial planning,
- Methods of social participation, public consultations, and negotiation techniques,
- GIS in social participation,
- Community-based planning and design,
- Participatory budgeting (Table 2).

Table 2. Social participation courses implemented in spatial planning curricula in Poland in 2023/24 academic year

University	Name of the course	Level	Number of hours	Obligatory course
Gdansk University of Technology, Faculty of Architecture	Participatory planning	II	60	Yes
Lodz University of Technology, Faculty of Civil Engineering	Social participation in spatial planning	I	30	Yes

University	Name of the course	Level	Number of hours	Obligatory course
Architecture and Environmental Engineering				
Wroclaw University of Science and Technology, Faculty of Architecture	Participation	I	30	Yes
Wroclaw University of Science and Technology, Faculty of Architecture	Participatory budgeting	II	45	No
University of Economics in Katowice	Methods of social participation	II	30	No
University of Economics in Kraków	Social participation in development management	I	30	Yes
University of Gdansk, Faculty of Oceanography and Geography	Social participation	II	30	No
Adam Mickiewicz University in Poznan	Social participation and elements of mediation	I	30	Yes
Adam Mickiewicz University in Poznan	GIS in social participation	I	30	Yes
Maria Curie-Skłodowska University in Lublin	Participation in spatial planning	I	30	Yes
Opole University	Social participation in spatial management	I	40	No
Opole University	Social participation and mediation in spatial planning	II	15	No
University of Life Sciences in Lublin	Social participation	I	30	No
University of Life Sciences in Wrocław	Community-based planning and design - Problem Based Learning	II	90	Yes
The University of Szczecin	Public consultations and negotiation techniques	I	30	Yes
University of Wrocław	Participation and mediation in spatial conflicts	II	24	No
The University of Lodz, Faculty of Geographical Sciences	Social participation in spatial planning	I, bachelor	30	No
The University of Lodz, Faculty of Geographical Sciences	Social participation in spatial planning	I, engineering	30	No
The University of Lodz, Faculty of Economics and Sociology	Social participation	I	28	Yes

Source: own elaboration.

Most students think that their current knowledge on participatory planning methods and tools is the result of university education (Fig. 7). However, only half of them is familiar with the digital participatory tools and methods. Interestingly, a large group of students would not be able to pick the most appropriate participatory method or tool for a specific project and goal.

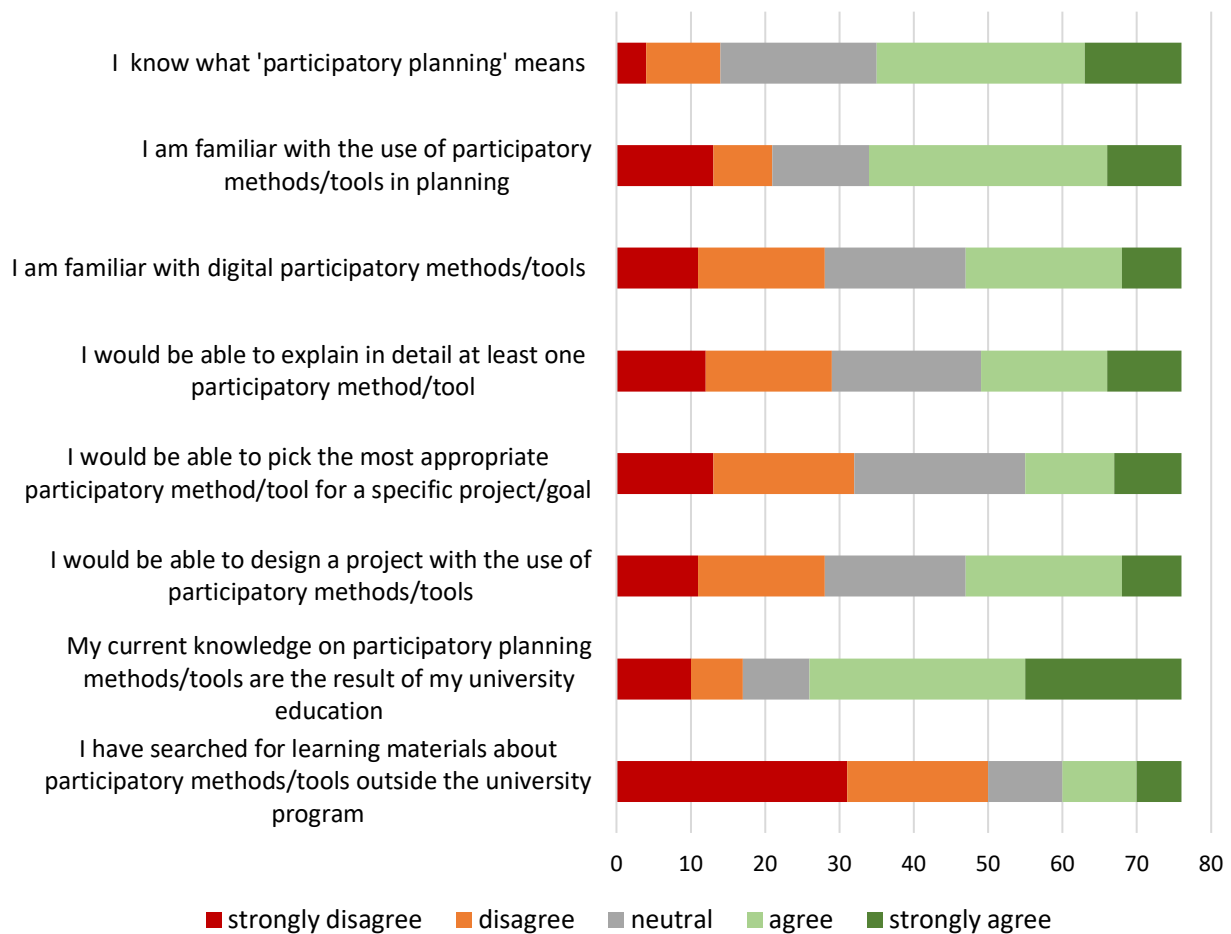


Figure 7. The students' understanding of the knowledge, competencies, and skills related to participatory planning (N=76)

Source: own elaboration based on surveys.

4.3. Contents: how is Participatory Planning intended within the courses?

Only one university in Poland – namely Gdansk University of Technology offers a separate course called ‘Participatory planning’. The aim of the classes is to familiarise students with theoretical and practical knowledge about participation in the processes of space design and planning. The course has been prepared to cover both activities carried out by local governments and grassroots non-governmental organizations. Practical exercises are also an integral element of the course, preparing participants for the practical application of their knowledge. During the course, the elements of participation required by law (social dialogue in planning procedures for adopting studies and local plans, participatory budget), legally binding civic initiatives (citizens' initiative), and other types of participatory activities (co-design, citizens' assembly, etc.) are presented. The course is divided into the following sections: 1) Theoretical introduction - introduction to the idea of participation; 2) Practical exercises - development of a participation scenario and participation in a practical exercise (one of the simplified forms of participation - e.g. inventory walk, meeting with stakeholders, interview); 3) Seminar exercise – discussion of a selected aspect of new participation practices.

Much more often in the spatial economy curricula we can find separate courses dedicated to social participation in spatial planning, than participatory planning. The following topics are discussed during those courses:

- The origins and main assumptions of social participation - in the ideological and practical dimensions,
- The legal conditions for conducting participation processes - the role of regulations for public consultations and applicable laws,
- The importance of public participation in the planning process,
- The significance of participatory processes for the local communities (local governments and non-governmental organizations),
- The features of effective participation,
- Rules for identifying process participants and their roles (local governments, residents, activists),
- Planning the main steps of participation process and its components (identification of stakeholders, case examination, process design, implementation, feedback, evaluation),
- Principles and techniques of communication in participation process,
- Review of participation's forms (consultations in the preparation of local plans, revitalisation plans, participatory budget, referendum, legislative initiatives, etc.),
- Review of tools and new initiatives (role of digital tools, new participation tools).

In the case of practical tasks carried out during the classes, students usually perform a social participation scenario project for a selected case study, taking into account the profiling of process participants and the social and cultural context of a given situation.

There are obvious gaps among Polish students in a field of European participatory planning issues (Fig. 8). Students have also a problem with indicating actual examples of participatory planning.



Figure 8. The students' understanding of the knowledge of concrete cases related to participatory planning (N=76)

Source: own elaboration based on surveys.

4.4. Methods: how is Participatory Planning taught?

Among the teaching methods used in participatory planning education, one of the most popular is problem lecture supported by a multimedia presentation. During the lectures teachers like to use images, maps, videos, and other multimedia elements to provide context and background information about the problems to engage students actively into discussion. By using a problem-based lecture supported by a multimedia presentation, participatory planning educators can create an engaging and interactive learning experience that helps students develop critical thinking, problem-solving, and collaboration skills.

Simulation games are another method used in participatory planning education. As students play the simulation game, the teacher acts as a facilitator to guide the process, answer questions, and provide support if needed. The role of the teacher is to encourage active participation and collaboration among students as they negotiate and make decisions to address the planning challenges presented in the game. By incorporating simulation games into participatory planning education, educators can provide students with valuable experiential learning opportunities that deepen their understanding of planning processes and prepare them for the complexities of real-world planning practice.

A case studies analysis is also a popular educational method used in participatory planning education in Poland. Integrating case studies analysis into participatory planning education can offer students a practical understanding of real-world planning challenges, processes, and outcomes.

Interactive online tools play a crucial role in participatory planning education by facilitating collaboration, data visualization, and engagement with stakeholders. During the social participation classes teachers use: 1) Mapping Platforms - Google Maps which offers tools for creating custom maps, adding points of interest, and sharing location-based information with stakeholders or OpenStreetMap which is an open-source mapping platform that allows users to create and edit maps collaboratively, making it ideal for participatory mapping projects; 2) Online Survey Tools – e.g. SurveyMonkey which is a popular online survey tool that allows to create surveys, collect responses, and analyse data to gather feedback from stakeholders; 3) Online Meeting Platforms - which enable educators to host virtual lectures, seminars, and workshops, allowing students to participate remotely in participatory planning activities; 4) Social Media Platforms - for creating online communities around participatory planning topics, facilitating discussions, sharing resources, and organizing events. All interactive online tools can enhance participatory planning education by facilitating communication, collaboration, data analysis, and engagement with stakeholders in virtual or remote learning environments.

4.5. Digital participatory planning tools

Digital tools play a crucial role in facilitating participatory planning by enhancing communication, data collection, and collaboration among stakeholders. Here are some common digital tools used in participatory planning education in Poland:

- Geographic Information Systems - GIS platforms, such as ArcGIS, QGIS,
- Participatory Mapping Tools - Platforms like OpenStreetMap,
- VR-based tools of participatory design,
- Web-based Collaboration Platforms,
- Online Surveys and Questionnaires,
- Social Media Platforms,

- Storytelling Platforms - tools like Story Maps (Esri).

The choice of digital tools used during classes depends on the specific goals of the participatory planning process, the characteristics of the community, and the resources available. Integrating a combination of these tools can enhance the effectiveness of participatory planning education. However, it is worth to notice that usage of digital tools in social participation is not an obvious part of the courses. Much more time is spent on theoretical issues such as: legal basis, lectures on techniques used in participation processes etc.

Polish respondents have rather positive attitude to the participatory methods and tools using in spatial planning (Fig. 9). Most of them believe that it is important to have a good knowledge of digital participatory methods and tools for the practice of planning. They also think that both digital and non-digital participatory methods or tools should be adopted when participatory methods are used.

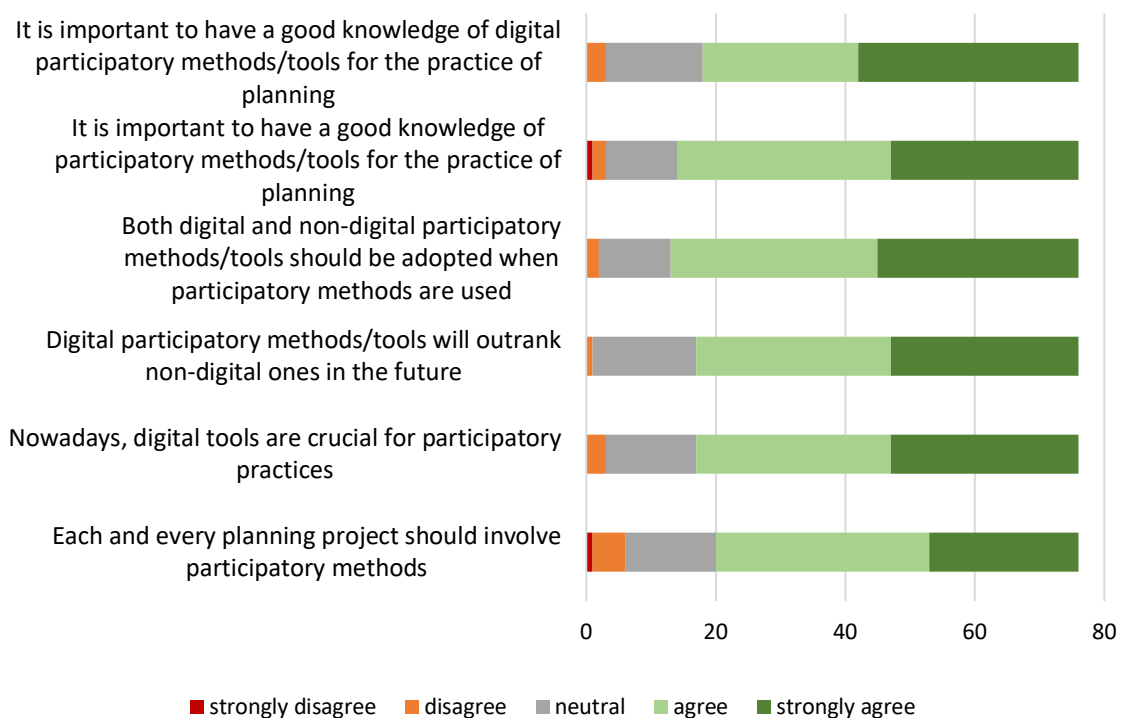


Figure 9. The students' understanding of digital tools related to participatory planning (N=76)

Source: own elaboration based on surveys.

21 students with professional experience in spatial planning took part in the survey. Interestingly most of them have never used any participatory methods or tools (see Fig. 10).

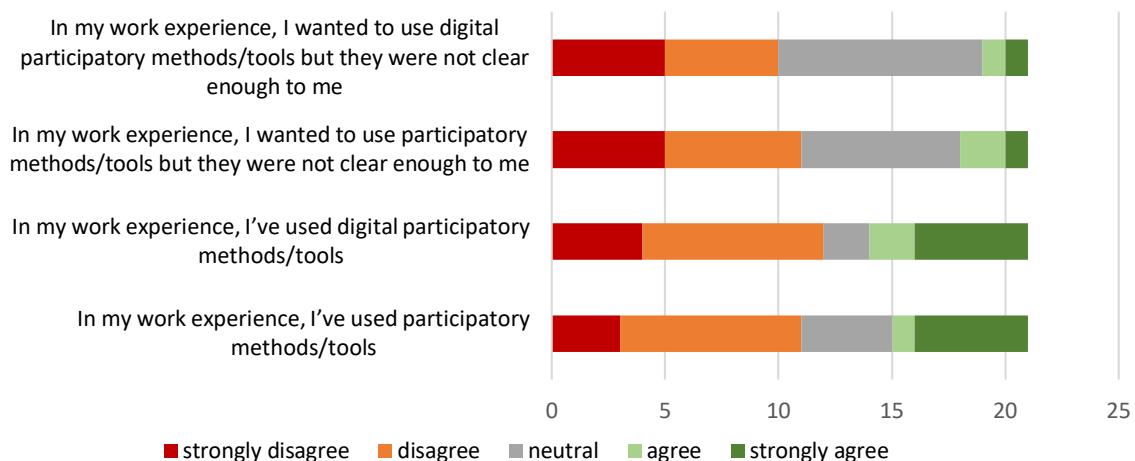


Figure 10. The students' with work experience opinion on participatory planning tools in practice (N=21)

Source: own elaboration based on surveys.

5. Good practices on participatory planning education and training

5.1. Major strengths and weaknesses in participatory planning teaching

Major strengths in participatory planning teaching in Poland (Table 3) include an interdisciplinary approach that fosters a holistic understanding of community development, engagement through real case studies offering practical experience, and an emphasis on critical thinking skills. However, major weaknesses include inadequate technology training, with some programs failing to effectively teach digital tools for community engagement, and a lack of standardisation across institutions, resulting in variations in the quality and content of education. Additionally, the theoretical emphasis over practical skills and the absence of dedicated courses specifically addressing participatory planning issues are notable shortcomings.

Table 3. Major strengths and weaknesses in participatory planning teaching in Poland

Major strengths	Major weaknesses
<p>Interdisciplinary approach to planning issues – participatory planning programs embrace an interdisciplinary approach, drawing from fields such as urban planning, geography, management, sociology, and environmental studies. This helps to increase students' holistic understanding of community development,</p> <p>Community engagement through real case studies - Participatory planning teaching often incorporates real-world case studies and practical exercises, providing students with tangible examples and hands-on experience,</p> <p>Forcing students to the critical thinking – students recognised various limitations and weaknesses of application a participatory planning in a real-word situations. This allows students to critically asses</p>	<p>Theoretical emphasis over practical skills and inadequate technology training - While digital tools are essential in participatory planning, some programmes may not adequately train students in the effective use of technology, limiting their ability to leverage these tools for community engagement in the future,</p> <p>Lack of standardization - lack of standardisation in participatory planning courses, leading to variations in the quality and depth of education across different institutions. Moreover, many of the universities still don't have separate courses dedicated to participatory planning issues.</p>

participatory techniques in planning, but also to creatively solve the issues already identified.	
---	--

Source: own elaboration.

5.2. Review of good practices on participatory planning education

5.2.1. Example I – ‘Locals talking - panel discussions’ during ‘SPOT - Sustainable Spatial Planning of Tourism Destinations’ under Erasmus+ Programme, University of Lodz

The aim of the ‘Sustainable Spatial Planning of Tourism Destinations – SPOT’ project was to develop an innovative teaching method of sustainable tourism spatial planning in a master programme and implement the method at five educational organisations involved in the project. The SPOT project was implemented by the consortium of educational and scientific institutions co-operating on a regular basis, representing various research, educational, cultural, and geographical contexts⁸.

The study visits were the most interesting part of the SPOT project from students’ perspective. Increase the knowledge and key competencies of students in the field of sustainable planning of tourism destinations was expected. Integrated and recognised learning skills and qualifications for and innovative educational method, coherent at EU level were developed.

During the SPOT project the students were participating in "Locals Talking" panel discussion which was an integral component of an intensive weekly course focused on a specific planning process or problem within a designated case study area. This structured meeting format involves a group of individuals knowledgeable or interested in the topic discussing it in front of an audience, with a facilitator moderating the conversation. The primary objective is to provide students with insights from local stakeholders, gaining perspectives not covered in media, and fostering a deeper understanding of real-life challenges and opportunities in the case study area. Students, assigned to study a planning process or problem beforehand, conduct theoretical and analytical research. The "Locals Talking" panel discussion⁹ serves as a tool to extract local knowledge from stakeholders, categorized into 'experts' (professionals with official roles in the process) and 'non-experts' (those affected or benefiting personally). Notably, professionals and non-experts exhibit fundamental differences in their perspectives on physical surroundings, approaches to problems, information sources, and issue priorities, as validated by various researchers. To accommodate these differences, the workshop comprises two distinct panel discussions: the first involves representatives from governmental institutions, municipalities, and planning authorities, termed the 'expert panel discussion'. The second features members of the local community and is referred to as the 'non-expert panel discussion.' The overall structure includes individual panel discussions, followed by a general evaluation meeting where students present their studies, receiving feedback, comments, and questions from all local stakeholders. This approach aims to stimulate action and provide a comprehensive understanding of the planning process or problem within the case study area (Sarıkaya Levent & Levent 2022).

⁸ <https://spot-erasmus.eu/repository/> [Accessed on 1.03.2024]

⁹ The detailed description of the event <https://spot-erasmus.eu/2022/09/langhe-roero-and-monferrato-for-sustainable-tourism-locals-talking/> [Accessed on 09.04.2024]



Figure 11. Locals talking in Langhe-Roero and Monferrato (Italy) in 2022

Source: <https://spot-erasmus.eu/2022/09/langhe-roero-and-monferrato-for-sustainable-tourism-locals-talking/> [Accessed on 09.04.2024]

The results of the project become a part of the free on-line course “Sustainable Tourism in the Baltic Sea Region” under Baltic University Programme (BUP)¹⁰. One of the key missions BUP is the creation of courses from different academic disciplines with both theoretical and practical focuses.

5.2.2. Example II – Course on ‘GIS in social participation’ – Adam Mickiewicz University in Poznań

The course ‘*GIS in social participation*’ – Adam Mickiewicz University in Poznań aims to acquaint students with the opportunities and conditions for employing GIS in public participation processes within spatial planning. This includes a comprehensive understanding of the concept, methods, and tools associated with participatory GIS. Additionally, a course for students to use GIS in public consultations in spatial planning.

The course covers the following topics:

- Conditions and impact of society digitalization on participatory management processes in local government units,
- The origins of the use of GIS by societies,
- Concepts and methods of using GIS in social participation processes,
- Geoweb tools used in public consultation processes in spatial planning and their properties,
- The role, place and conditions of using GIS in decision-making processes in spatial management,
- Designing public consultation processes using GIS,
- Analysis and reporting of the results of public consultations conducted using GIS.

The classes are conducted in the 5th semester. Students are obliged to become familiar with the 1) regulations regarding spatial planning in Poland, 2) issues related to public participation in spatial planning, 3) GIS software (ArcGIS or QGIS). The classes are conducted using problem-based learning, exercise method, project method, activating methods e.g. "brainstorming", and group work.

¹⁰ See: „Sustainable spatial planning of tourism destinations” - <https://catalog.studium.uu.se/browse/bup/courses/sustainable-tourism-in-the-baltic-sea-region> [Accessed on 1.03.2024]

5.2.3. Example III – Participatory Budget ‘wspUłrządzimy’ at the University of Lodz¹¹

The University of Lodz is the largest university in central Poland, boasting over 70 years of shared history. With almost 26,000 students enrolled in over 90 fields of study, University of Lodz employs nearly 4,000 individuals, including researchers, teachers, administrative staff, and participants in doctoral schools. The university comprises 12 faculties, a branch in Tomaszow Mazowiecki, a library, a publishing house, a kindergarten, a high school, and the Centre of Polish Language for Foreigners.

Students and employees who identify with the University play an extremely important role in its proper functioning. To encourage the active participation of the academic community in the collaborative design of the university space, the participatory budget called 'wspUłrządzimy' (means “we are governing together”) has been established. This year, a total of PLN 300,000 is allocated for projects. Any person studying or obtaining a doctorate at our university, as well as project teams, can apply. The University of Lodz's civic budget allows for obtaining funds for infrastructure projects, as well as the implementation of integration, scientific, cultural, sports, and ecological initiatives. One condition is that the projects must be universal, serving a larger group than the community of a single faculty or doctoral school. All students can submit project proposals and then participate in voting for the most interesting ones.

Participatory budgeting at the institutional level comes with several advantages, fostering transparency, inclusivity, and effective decision-making. The inclusion of both students and employees results in a more comprehensive understanding of community needs. It also gives a voice to students in the decision-making process. The participatory budgeting process provides an opportunity for public education. On one hand, participatory budget fosters a sense of shared responsibility and collaboration; on the other, it sensitizes young people to issues related to participation.

5.2.4. Example IV – the Local Government Spatial Data Platform offered by GIAP¹²

GIAP is a dynamically developing company producing GIS software. The main product is the Local Government Spatial Data Platform supporting the implementation of local government administration tasks. It includes dedicated domain applications, map portals, e-services and spatial data processing. GIAP is involved in the digitization of local plans, providing solutions for municipalities under the INSPIRE directive.

e-Participation is one of the solutions accessible via GIAP's Local Government Spatial Data Platform. It is designed for both residents (allows them to submit applications and comments online), and officials (by enabling access to all documentation from the portal). Geosurvey is a modern GIS tool used to collect opinions and conclusions online using a map platform. Thanks to the interactive map, respondents answer questions by indicating the area on the map. Activating residents to make joint decisions regarding the future of the commune is a key element of a modern local government, open to the needs of residents.

With an emphasis on the exchange of knowledge and experience, GIAP organizes GIS meetings, as well as conferences and seminars for public administration employees. The company also offers training in the field of processing and creating spatial data, photogrammetry and remote sensing, and photo interpretation.

¹¹ <https://www.uni.lodz.pl/aktualnosc/szczegoly/budzet-obywatelski-wspulrzedzimy> [Accessed on 16.03.2024]

¹² https://www.giap.pl/administracja_publiczna/ [Accessed on 16.03.2024]

GIAP offers trainings for users (office employees) in how to use the portal, and also provides advice and good practices in handling the participation process. They also provide assistance when using the tools through the support of the Technical Assistance Department. The company actively participates in promoting participation e.g. by organizing events for students like GISday at the Faculty of Geographical Sciences. In addition, they organize webinars addressed not only to customers, but also to all city and commune offices or students that are interested in social participation.

5.2.5. Example V - Form of completing the course ‘Social participation in spatial planning’ at the Faculty of Geographical Sciences (University of Lodz)

The aim of the course ‘Social participation in spatial planning’ is to show the role of participatory activities in modern society as a method of solving or counteracting problems in local communities. Students will learn what can be regulated through participation and what tools can be used to implement it.

To pass the course, students prepare a final paper in groups, consisting in coming up with a task for the participatory budget of the city of Lodz. The work consists of the following parts:

- Justification of the choice of the task and the needs for its implementation - Diagnosis of the needs of the local community and users of a public space, justification of the need to implement the task.
- Beneficiaries of the proposed task - Stakeholder analysis using mapping approach. Students determine both the level of influence and interest of individual project stakeholders (table) and the method of their involvement and communication (matrix).
- Location - Characteristics of the location of the plot where the project is to be implemented (address, description, map showing the current development, photographic documentation). Indicating a specific place: a street with a number, the premises of an institution or facility, a park.
- Task description - Detailed description of activities, stages of project implementation.
- Cost estimate - Description of the estimated costs of implementing the task (table) along with their detailed justification (description).
- Information about the rules of accessibility of the proposed task - Students are asked to provide for whom, on what hours, days of the week or month the indicated project is available and whether the use is paid or free of charge, etc.

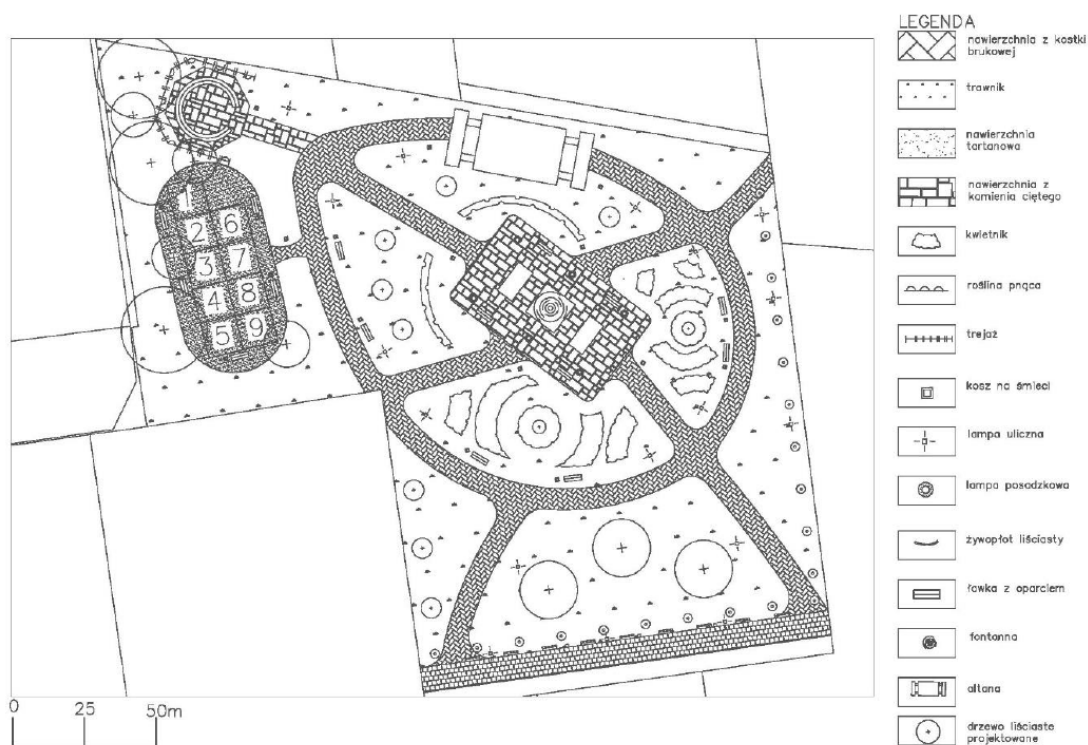


Figure 12. The example of playground design from the potential task for the participatory budget of the city of Lodz

Source: from K. Leśniewska-Napierała collection.

This kind of tasks allows students to apply theoretical knowledge to real-world scenarios, fostering a deeper understanding of the subject matter. Furthermore, active participation in such tasks promotes collaboration and communication skills, essential for effectively engaging with diverse stakeholders in the planning process. It sensitizes students as future planners.

6. Common needs and gaps

In participatory planning education, there are several common needs and gaps that educators, students and practitioners often encounter:

- Many spatial economy programs focus heavily on theoretical concepts and models, but there is often a lack of development of practical skills, especially in the case of participatory planning digital tools application.
- There is often a lack of emphasis on evaluation and monitoring of participatory planning processes and outcomes. Students need to learn how to design and implement evaluation frameworks to assess the effectiveness. Moreover, students need to know how to use participatory planning tools efficiently to solve all issues related to social participation, e.g. too long decision-making time.
- Participatory planning often involves working with communities from diverse cultural backgrounds, e.g. urban and rural populations, newcomers and incumbent populations, people of different economic and social status.
- With the increasing use of digital tools and technology in participatory planning, there is a need for students to develop technological skills.

- Conducting the spatial economy field of study in various types of universities with diversified educational program structures is justified by the specific nature of the field, determined mainly by the requirements of practice.

Aforementioned findings from desk research analysis are in line with students' opinions gathered from the students' survey (see Fig. 13). Students see benefits from attending both courses and programmes targeting both practical experience and theoretical knowledge related to participatory planning. Also, they identify digital participatory planning as an interesting and valuable content of spatial planning curricula. What is important, they eager not only to obtain general information about the methods of digital participatory planning, but also to develop their skills and competencies in digital tools application.

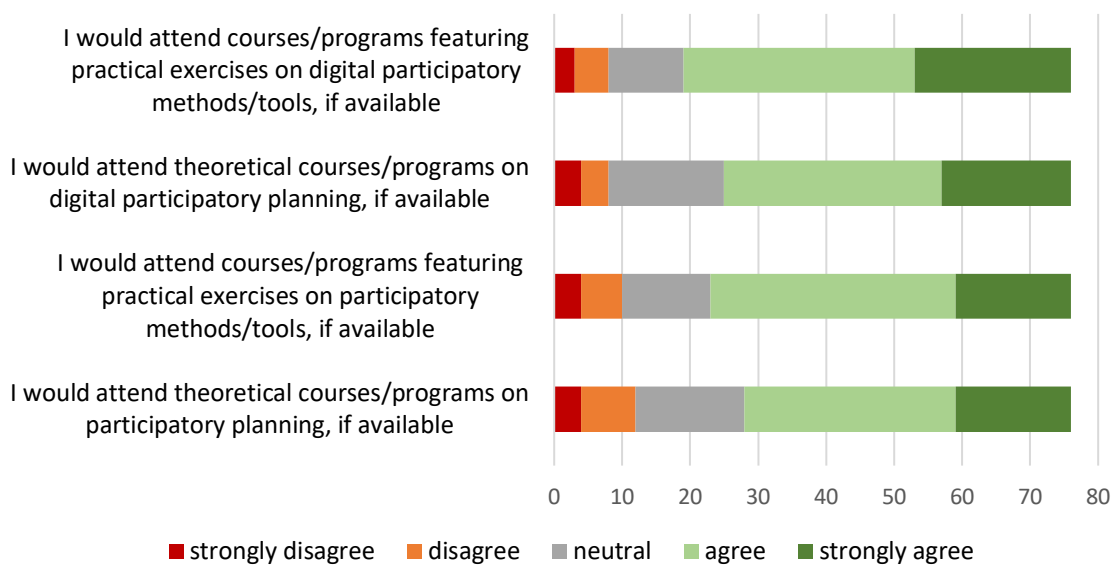


Figure 13. The students' opinion on need for additional courses related with participatory planning (N=76)

Source: own elaboration based on surveys.

By addressing these common needs and gaps in participatory planning education, educators can better equip students with the knowledge, skills, and attitudes needed to engage in effective and ethical participatory planning practices in diverse contexts.

7. References

'SPOT -- Sustainable Spatial Planning of Tourism Destinations' project website: <https://spot-erasmus.eu/repository/>

Assessment of the functioning and accessibility of commercial establishments in the rural commune of Brzeziny

Bernaciak, A., Rzeńca, A., and Sobol, A. (2017). Participatory Budgeting as a Tool of Environmental Improvements in Polish Cities. *Economic and Environmental Studies*, 17(44), 893–906.

Boryczka, E.M. (2015). Partycypacyjne instrumenty zarządzania jednostkami samorządu terytorialnego [Participatory instruments for the management of local government units]. In A. Nowakowska (Ed.), *Nowoczesne metody i narzędzia zarządzania rozwojem lokalnym i terytorialnym* (39-86). Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Brzeziński, K. (2017). Budżet (nie)obywatelski? – analiza czterech edycji łódzkiego budżetu obywatelskiego [The Non-Participatory Budget? – analysis of four editions of the participatory budget in Łódź, Poland]. *Pedagogika Społeczna* 3(65), 135-155.

Diagnosis of the state of spatial development of the area covered by the social program 'East of Śródmieście'

GIAP sp. z o.o. official website: <https://www.giap.pl/>

Grzyś, P. (2021). Inicjatywa lokalna–niewykorzystany potencjał czy skuteczny instrument aktywizacji obywateli w rozwiązywaniu problemów lokalnych? Przykład Łodzi [Local initiative – an unexploited potential or an effective instrument for citizens' involvement in solving local problems? The example of Łódź]. *Rozwój Regionalny i Polityka Regionalna*, (56), 99-114.

Hughes, W., Leśniewska-Napierała, K., & Masierek, E. (2023). Budżet obywatelski jako narzędzie partycypacji w procesach rewitalizacji miast. Przykład Łodzi [Participatory budgeting as a tool for participation in urban regeneration processes. The example of Łódź]. *Prace Geograficzne*, (172), 31-55.

Kikosicka, K. (2014). Partycypacja społeczności lokalnej w planowaniu przestrzennym (przykład gminy Dąbrowice) [Local Community Participation in Spatial Planning (Example Municipalities Dąbrowice)]. *Acta Universitatis Lodzianensis. Folia Geographica Socio-Oeconomica*, 16(1), 97-113.

Kobojek, E. (2013). Interdyscyplinarny wymiar kształcenia na kierunku Gospodarka Przestrzenna w świetle doświadczeń międzywydziałowych studiów w Uniwersytecie Łódzkim [Multidisciplinary Approach of Education on Spatial Economy in the Experience on Interfaculty Studies in the University of Łódź]. *Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 251, 153-163.

Kołodziejczak, A., & Mierzejewska, L. (Ed.). (2021). *Geografia społeczno-ekonomiczna: doświadczenia, szanse i wyzwania w procesie kształcenia* [Socio-economic geography: experiences, opportunities and challenges in the educational process]. Poznań: Bogucki Wydawnictwo Naukowe.

Kudłacz, T., & Zawilińska, B. (2013). Kształcenie na kierunku Gospodarka Przestrzenna w uniwersytetach ekonomicznych [Education on Spatial Economy at Economic Universities]. *Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 251, 53-64.

Leśniewska-Napierała K., 2017. Budżet obywatelski jako narzędzie finansowania inwestycji w Łodzi [Participatory budget as a tool for financing investments in Łódź]. *Studia Miejskie*, 25, 107-119.

Leśniewska-Napierała, K., & Mikołajczyk, T. (2022). Ocena stanu partycypacji społecznej w planowaniu przestrzennym na poziomie lokalnym w Polsce [Assessment of the state of social participation in spatial planning at the local level in Poland]. *Space – Society – Economy*, 33, 41–64.

Leśniewska-Napierała, K., & Napierała, T. (2020). Participatory budgeting: creator or creation of a better place? Evidence from rural Poland. *Bulletin of Geography. Socio-economic Series*, 48, 65-81.

Mikołajczyk, T. (2023). Funkcjonowanie budżetu obywatelskiego w małych miastach województwa łódzkiego [Functioning of the civic budget in small towns of the lodzkie voivodship]. *Studia Miejskie*, 46, 61-73.

Rachwał, T. (2021). Kształcenie w zakresie geografii społeczno-ekonomicznej na kierunkach geografia oraz gospodarka przestrzenna–szanse i wyzwania w świetle opinii studentów Uniwersytetu Pedagogicznego w Krakowie [Social and economic geography education in the fields of geography and spatial management – opportunities and challenges in the light of students' opinions (based on the

example of the Pedagogical University of Kraków)]. In A. Kołodziejczak & L. Mierzejewska (Eds.), *Geografia społeczno-ekonomiczna: doświadczenia, szanse i wyzwania w procesie kształcenia* (231-258). Poznań: Bogucki Wydawnictwo Naukowe.

Rochmińska, A., Leśniewska-Napierała, K. (2017). *Perspectives of changes in the spatial development of the palace and park complex in Bratoszewice in the Stryków municipality.*

Rochmińska, A., Leśniewska-Napierała, K. (2018). *Diagnosis of the state of spatial development of the area covered by the social program 'East of Śródmieście'.*

Rochmińska, A., Leśniewska-Napierała, K. (2022). *Assessment of the functioning and accessibility of commercial establishments in the rural commune of Brzeziny.*

Sarikaya Levent, Y., & Levent, T. (2022). Understanding perspective of local stakeholders. 'Locals talking' panel discussions (Workshop scenario). In T. Napierała & I. Pielesiak (Eds.), *Sustainable spatial planning of tourism destinations: Manual for teachers* (63-71). Lodz: The SPOT project.

Ślodziak, J., Szafranek, E., & Śliwa, M. (2013). Gospodarka Przestrzenna jako wieloobszarowy kierunek studiów. Wymogi i konsekwencje budowy programu kształcenia [Spatial Economy as a Multidisciplinary Course of Studies. Programme Requirements and Methodology]. *Biuletyn Komitetu Przestrzennego Zagospodarowania Kraju PAN*, 251, 140-152.

The Baltic University Programme – Course Platform website: <https://catalog.studium.uu.se/>

The Law on Higher Education and Science [Ustawa z dnia 20 lipca 2018 r. - Prawo o szkolnictwie wyższym i nauce], Dz.U. 2018 poz. 1668.

The Polish Accreditation Committee official website: <https://pka.edu.pl/>

The RAD-on system database: <https://radon.nauka.gov.pl/>

The regulation of the Minister of Science and Higher Education from 20th September 2018 on fields of science and scientific disciplines and artistic disciplines [Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 20 września 2018 r. w sprawie dziedzin nauki i dyscyplin naukowych oraz dyscyplin artystycznych], Dz.U. 2018 poz. 1818.

University of Lodz official website: <https://www.uni.lodz.pl/>

University Study-Oriented System of University of Lodz: <https://usosweb.uni.lodz.pl/>

8. Annexes

8.1. Annex I – List of programmes on “Spatial planning/spatial management” in Poland

Institution	Profile	ISCED	Professional title	Number of semesters	ECTS
Akademia Nauk Stosowanych w Nowym Targu	practical	0731	Engineer	7	210
Katolicki Uniwersytet Lubelski Jana Pawła II w Lublinie	academic	-	Master of Engineering	3	90
Politechnika Białostocka	academic	0719	Engineer	7	210
Politechnika Białostocka	academic	0719	Master of Engineering	3	90
Politechnika Gdańska	academic	0312	Engineer	7	180
Politechnika Gdańska	academic	0731	Master of Engineering	3	90
Politechnika Gdańska	academic	0731	Master's degree	3	90
Politechnika Krakowska im. Tadeusza Kościuszki	academic	0731	Engineer	7	210
Politechnika Krakowska im. Tadeusza Kościuszki	academic	0731	Master of Engineering	3	90
Politechnika Łódzka	academic	0731	Engineer	8	240
Politechnika Warszawska	academic	0731	Engineer	7	210
Politechnika Warszawska	academic	0731	Master of Engineering	3	90
Politechnika Wrocławska	academic	0731	Engineer	7	210
Politechnika Wrocławska	academic	0731	Master of Engineering	4	120
Politechnika Wrocławska	academic	0731	Master of Engineering	3	90
Szkoła Główna Gospodarstwa Wiejskiego w Warszawie	academic	0731	Engineer	7	210
Szkoła Główna Gospodarstwa Wiejskiego w Warszawie	academic	0731	Master's degree	3	90
Uniwersytet Ekonomiczny w Katowicach	academic	0311	Bachelor	6	180
Uniwersytet Ekonomiczny w Katowicach	academic	0311	Master's degree	4	120
Uniwersytet Ekonomiczny w Krakowie	academic	0788	Bachelor	6	180
Uniwersytet Ekonomiczny w Krakowie	academic	0788	Engineer	7	210
Uniwersytet Ekonomiczny w Krakowie	academic	0788	Master's degree	4	120
Uniwersytet Ekonomiczny w Krakowie	academic	0788	Master's degree	3	90
Uniwersytet Ekonomiczny we Wrocławiu	academic	0731	Master's degree	4	120
Uniwersytet Gdański	academic	0522	Bachelor	6	180
Uniwersytet Gdański	practical	0731	Engineer	7	210
Uniwersytet Gdański	academic	0522	Master's degree	4	120

Institution	Profile	ISCED	Professional title	Number of semesters	ECTS
Uniwersytet im. Adama Mickiewicza w Poznaniu	academic	0731	Bachelor	6	180
Uniwersytet im. Adama Mickiewicza w Poznaniu	academic	0731	Engineer	6	180
Uniwersytet im. Adama Mickiewicza w Poznaniu	academic	0731	Engineer	7	210
Uniwersytet im. Adama Mickiewicza w Poznaniu	academic	0731	Master's degree	3	90
Uniwersytet im. Adama Mickiewicza w Poznaniu	academic	0731	Master's degree	4	120
Uniwersytet Komisji Edukacji Narodowej w Krakowie	academic	0731	Engineer	7	210
Uniwersytet Komisji Edukacji Narodowej w Krakowie	academic	0731	Master's degree	3	90
Uniwersytet Łódzki (WNG)	academic	0532	Bachelor	6	180
Uniwersytet Łódzki (WES)	practical	0319	Bachelor	6	180
Uniwersytet Łódzki (WNG)	academic	0532	Engineer	7	210
Uniwersytet Łódzki (WNG)	academic	0311	Master's degree	4	120
Uniwersytet Łódzki (WNG)	academic	0311	Master's degree	3	90
Uniwersytet Łódzki (WES)	academic	0311	Master's degree	4	120
Uniwersytet Marii Curie-Skłodowskiej w Lublinie	practical	0731	Engineer	7	180
Uniwersytet Marii Curie-Skłodowskiej w Lublinie	academic	0532	Master's degree	3	90
Uniwersytet Mikołaja Kopernika w Toruniu	academic	0532	Engineer	7	210
Uniwersytet Opolski	practical	0731	Engineer	7	210
Uniwersytet Opolski	academic	0731	Engineer	7	210
Uniwersytet Opolski	academic	0731	Master's degree	4	120
Uniwersytet Przyrodniczy w Lublinie	academic	0731	Engineer	7	210
Uniwersytet Przyrodniczy w Lublinie	academic	0731	Master of Engineering	3	90
Uniwersytet Przyrodniczy w Poznaniu	academic	0731	Engineer	7	210
Uniwersytet Przyrodniczy w Poznaniu	academic	0731	Master's degree	3	90
Uniwersytet Przyrodniczy we Wrocławiu	academic	0731	Engineer	7	210
Uniwersytet Przyrodniczy we Wrocławiu	academic	0731	Master of Engineering	3	90
Uniwersytet Rolniczy im. Hugona Kołłątaja w Krakowie	academic	0731	Engineer	7	210
Uniwersytet Rolniczy im. Hugona Kołłątaja w Krakowie	academic	0731	Master of Engineering	3	90
Uniwersytet Szczeciński	academic	0731	Bachelor	6	180
Uniwersytet Szczeciński	academic	0731	Engineer	7	210
Uniwersytet w Siedlcach	academic	0731	Engineer	7	210

Institution	Profile	ISCED	Professional title	Number of semesters	ECTS
Uniwersytet w Siedlcach	academic	0731	Master of Engineering	3	90
Uniwersytet Warmińsko-Mazurski w Olsztynie	academic	0731	Engineer	7	210
Uniwersytet Warmińsko-Mazurski w Olsztynie	academic	0731	Master of Engineering	3	90
Uniwersytet Warszawski	academic	0319	Bachelor	6	180
Uniwersytet Warszawski	academic	0319	Master's degree	4	120
Uniwersytet Wrocławski	academic	0532	Bachelor	6	180
Uniwersytet Wrocławski	academic	0532	Master's degree	4	120

ISCED: 0731 - Architecture and town planning; 0532 - Earth sciences; 0319 - Social and behavioural sciences, not elsewhere classified; 0311 – Economics; 0788 - Engineering, manufacturing and construction, inter-disciplinary programmes; 0719 - Engineering and engineering trades, not elsewhere classified.

Source: own elaboration based on RAD-on <https://radon.nauka.gov.pl/dane/studia-prowadzone-na-okreslonym-kierunku?pageNumber=2&name=Gospodarka%20przestrzenna&pageSize=50&fieldName=name&sortOrder=ASC> [Access 16.02.2024].

8.2. Annex II – Interview protocols

The list of questions used during the interviews:

- Do you know any examples of external events or activities on social participation which are available for the students/practitioners?
- Do you offer any digital participation training? If so, which ones and who most often participates in them? If not, how do stakeholders gain knowledge about the products you offer?
- Do you organize the participation process using the offered tools? Or does it remain the responsibility of the commune?
- Do you promote digital participation? If so, in what way? If not, why?
- Do you teach local communities and representatives of municipal offices how to use the offered tools (applications) and how?
- What digital tools for social participation do you offer? Do you teach local communities and representatives of municipal offices how to use the offered tools (applications) and how?
- What kind of tools using for social participation do you present to your students?
- What kind of digital using for social participation do you present to your students?
- What tools do you know (including digital ones) in the field of social participation that are used during social participation or participatory planning courses?

8.3. Annex III – List of interviewees

Date	Institution	Role
10.03.2024	Polish Academy of Science	PhD candidate
13.03.2024	Polish Geographical Society	Spatial planning curricula coordinator
15.03.2024	University of Lodz	Social participation teacher
20.03.2024	Adam Mickiewicz University in Poznań	Social participation teacher
21.03.2024	Economic University in Poznań	Social participation teacher

25.03.2024	University of Lodz	Social participation teacher
27.03.2024	GIAP	Social participation digital tools seller

8.4. Annex IV – Survey structure and results

1. Demographic data

Gender of the respondents (N=76)

Gender	Number of answers
Woman	51
Man	24
Non-binary	1

Age of the respondents (N=76)

Age	Number of answers
18-21	47
22-24	23
25-27	5
28+	1

Citizenship of the respondents (N=76)

Citizenship	Number of answers
Polish	76
Other	0

Education level (concluded) of the respondents (N=76)

Educational level	Number of answers
high school	50
BA	24
MA	2

Location where the respondent obtained his/her last school qualification (N=76)

Country	Number of answers
Poland	76
Other	0

Degree level (currently enrolled in) of the respondents (N=76)

Level	Number of answers
Bachelor	39
Engineering	14
MA	23

Work experience of the respondents in planning-related tasks – including internships (N=76)

Work experience	Number of answers
Up to 6 months	18
1-5 years	1
7-12 months	1
more than 5 years	1
non	55

Respondents form international exchange (N=76)

Answer	Number of answers
Yes	0
No	76

2. General knowledge about PPL and its digital turn

Question	Number of answers					
	1	2	3	4	5	Total
I know what "participatory planning" means	4	10	21	28	13	76
I am familiar with the use of participatory methods/tools in planning	13	8	13	32	10	76
I am familiar with digital participatory methods/tools	11	17	19	21	8	76
I would be able to explain in detail at least one participatory method/tool	12	17	20	17	10	76
I would be able to pick the most appropriate participatory method/tool for a specific project/goal	13	19	23	12	9	76
I would be able to design a project with the use of participatory methods/tools	11	17	19	21	8	76
My current knowledge on participatory planning methods/tools are the result of my university education	10	7	9	29	21	76
I have searched for learning materials about participatory methods/tools outside the university program	31	19	10	10	6	76
The use of participatory methods/tools in planning in Poland is well established	1	18	48	8	1	76
The use of participatory digital tools in planning in Poland is well established	4	19	40	10	3	76
I could describe actual examples of participatory planning in Poland	8	18	25	19	6	76
I could describe actual examples of participatory planning in Europe	15	23	19	12	7	76
I could describe actual examples of participatory planning in Poland that used digital tools	14	22	22	16	2	76
I could describe actual examples of participatory planning in Europe that used digital tools	18	20	25	9	4	76
Each and every planning project should involve participatory methods	1	5	14	33	23	76
Nowadays, digital tools are crucial for participatory practices	0	3	14	30	29	76
Digital participatory methods/tools will outrank non-digital ones in the future	0	1	16	30	29	76
Both digital and non-digital participatory methods/tools should be adopted when participatory methods are used	0	2	11	32	31	76
It is important to have a good knowledge of participatory methods/tools for the practice of planning	1	2	11	33	29	76
It is important to have a good knowledge of digital participatory methods/tools for the practice of planning	0	3	15	24	34	76
<i>In my work experience, I've used participatory methods/tools</i>	3	8	4	1	5	21
<i>In my work experience, I've used digital participatory methods/tools</i>	4	8	2	2	5	21
<i>In my work experience, I wanted to use participatory methods/tools but they were not clear enough to me</i>	5	6	7	2	1	21
<i>In my work experience, I wanted to use digital participatory methods/tools but they were not clear enough to me</i>	5	5	9	1	1	21

3. Information concerning the course currently attended and desiderata

Question	Number of answers					
	1	2	3	4	5	Total
There is at least a basic introduction to participatory methods/tools	0	4	12	35	25	76
Participatory methods/tools are consistently part of the curriculum	2	7	22	30	15	76
The presence of participatory methods/tools in the curriculum has been relevant for me in choosing this specific program	15	19	29	9	4	76
Public participation and participatory planning is explained theoretically	1	1	16	36	22	76
There is the chance to understand how participatory methods/tools work thanks to the study of actual projects/case study	1	5	27	36	7	76
I get the chance to reflect on how to apply participatory methods/tools in one or more real-life exercise	3	6	23	35	9	76
I am confident I will be able to use participatory methods/tools when I will finish my university courses	2	3	22	38	11	76
Digital public participations in planning is addressed in the university program from a theoretical point of view	4	11	28	28	5	76
There is the chance to understand how digital participatory methods/tools work thanks to the study of actual projects/case study	4	14	29	26	3	76
I get the chance to reflect on how to apply digital participatory methods/tools in a real-life exercise	7	11	32	21	5	76
I am confident I will be able to use digital participatory methods/tools when I will finish my university courses	2	5	32	24	13	76
I would attend theoretical courses/programs on participatory planning, if available	4	8	16	31	17	76
I would attend courses/programs featuring practical exercises on participatory methods/tools, if available	4	6	13	36	17	76
I would attend theoretical courses/programs on digital participatory planning, if available	4	4	17	32	19	76
I would attend courses/programs featuring practical exercises on digital participatory methods/tools, if available	3	5	11	34	23	76