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THE IMPORTANCE OF TEACHERS' PERCEPTION OF SPACE IN EDUCATION

POMEN UČITELJEVEGA ZAZNAVANJA PROSTORA V IZOBRAŽEVALNEM PROCESU

Jerneja Fridl, Mimi Urbanc, Primož Pipan

IGOR LAPAJNE

Everyone, not just planners and decision-makers, have a responsibility for future development. It is therefore important to carefully plan actions to raise awareness, especially among youth, equipping them with the ability to comprehend the tangible results of their lifestyle and how they themselves can contribute to improving the space they inhabit.
Za prihodnji razvoj smo odgovorni vsi, ne le peščica načrtovalcev in nosilcev odločanja. Zato je treba bolj načrtno osveščati še zlasti mlade, da se bodo zavedali, kako njihove vsakdanje življenjske prakse odsevajo v prostoru in kako lahko sami prispevajo k izboljšanju stanja.

The Importance of Teachers' Perception of Space in Education

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ABSTRACT: In addition to environmental problems, spatial pressures are also being exacerbated by increasing economic development, the prosperity of the European population, and the increasing needs of various activities. These can only be mitigated through carefully planned use of space, which demands more active inclusion of the public in addition to relevant services. For successful public inclusion it is important for both individuals and social communities to be aware that space is a limited commodity exposed to increasing social and economic pressure. This kind of awareness demands an informed and educated population that will not only build its attitude towards space based on conceptual knowledge, but also supplement this through perceptual knowledge obtained in education. Active, responsible, and critical citizens can only be cultivated by properly educated, informed, and motivated teachers. These teachers can use new methods to address many existing topics and include new topics to considerably broaden their students' minds. This is also what this paper seeks to demonstrate. It focuses on the comprehension of space through spatial perception, further development of routine conceptual knowledge through fieldwork, and the possibility of applying selected methods to learning processes. The goal of these efforts will be achieved when individuals and society understand that we are all responsible for space and therefore the attitude towards it must change as soon as possible if space is to be preserved for future generations in the spirit of sustainable development.

KEY WORDS:
Geography, space, spatial perception, education, sustainable spatial development, Slovenia

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ADDRESSES:
Jerneja Fridl, M. Sc.
Anton Melik Geographical Institute
Scientific Research Centre of the Slovenian Academy of Sciences and Arts
Gosposka ulica 13, 1000 Ljubljana, Slovenia
E-mail: jerneja@zrc-sazu.si

Mimi Urbanc, Ph. D.
Anton Melik Geographical Institute
Scientific Research Centre of the Slovenian Academy of Sciences and Arts
Gosposka ulica 13, 1000 Ljubljana, Slovenia
E-mail: mimi@zrc-sazu.si

Primož Pipan
Anton Melik Geographical Institute
Scientific Research Centre of the Slovenian Academy of Sciences and Arts
Gosposka ulica 13, 1000 Ljubljana, Slovenia
E-mail: primoz.pipan@zrc-sazu.si

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1 Introduction

Pressing environmental, economic, and social issues have placed the concept of »sustainable development« at the forefront; this concept has become a constant of various international agreements and legislative documents. Many understand it as a miraculous formula that in the long run will resolve the problems accumulated by mankind. However, the path to realizing sustainable development is extremely long and depends primarily on the level of economic development and social development, the political system of individual countries, and the awareness and education of their people. Sustainable development is a paradigm of the new age, which first and foremost demands thorough knowledge of the issues in question and new thought patterns by professionals that plan future development, by those in charge of adopting and implementing decisions, and by people whose everyday practices, bad habits, and actions influence the planning of future economic, social, and spatial development. The sustainable development process begins with people and their lifestyles, which depends on how they perceive their living environment. People have a direct or indirect impact on the use of space, in which they are insufficiently aware that space is a limited commodity constantly exposed to increasing pressure (Urbanc and Fridl 2007). Comprehending space depends on many factors, among which upbringing and education play an important role. The purpose of education is to supplement our conceptual knowledge, which predominates in our concept of the world, with perceptual knowledge. It is essential that the information we carry in our minds (i.e., conceptual knowledge gained through experience, family patterns, and previous education) be built upon with information obtained from our surroundings, thus supplementing our knowledge network (i.e., with perceptual knowledge). Only in this way can a different attitude towards space and new thought and behaviour patterns be imparted to people. This research focuses on analyzing the current situation in education for sustainable spatial development and seeking new paths for enriching the content and methodologies used in education so that individuals and society will change their attitude towards space.

2 The importance of education for sustainable spatial development

In countries where the level of economic and social development surpasses that of Slovenia, comprehending space is not merely an academic domain, but also has practical value. For several decades, people have been well aware that, in order to achieve sustainable development, the population and their comprehension of the living environment must be taken into account when planning and making decisions. This has proven to be especially important in recent years, when the direct connection between the immediate living environment and people has been weakening due to a decline in the rural population (Palang et al. 2006, 355). This is why new paths must be found to preserve the links between people and space. More active involvement in the planning and decision-making process is definitely one of these paths (Resnik Planinc 2008b, 27). Due to ideological reasons persisting from communist Yugoslavia and the top-down approach connected with them, Slovenia has a short and poorly developed tradition of including the public in planning processes. In order to effect changes to improve the situation in this area, one must start at the beginning – that is, with people's upbringing and education. The goal is to raise people's awareness so that they will further develop their view of space and become more sensitive to and disposed toward changes that affect it, as well as be able to critically present and justify their views in certain spatial-planning procedures, such as formal public unveilings of development plans, or in informal forms of public participation, such as workshops, deliberations, and discussions (Kušar 2008, 40). Raising individuals' and social groups' awareness about their rights and responsibilities in the planning process is thus the basic precondition for sustainable development (Resnik Planinc 2008a, 56). This will be especially effective if it becomes part of primary school education and continues on to the highest levels of education. Children are the most important here because they are the most liable to change their views and behaviour patterns, and in a few years they will be the ones that assume the burden of responsibility for future development. Introducing changes into the school system begins by educating teachers, who play the key role in this process.

It is therefore no coincidence that the United Nations Economic Commission for Europe, which is part of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), declared the period from 2005 to 2014 as the Decade of Education for Sustainable Development (Internet 1). The

UNESCO Education for Sustainable Development Strategy, the European Spatial Development Perspectives, the Lisbon Strategy, and similar strategic documents were also used as a basis by the international project titled »Raising Awareness of Values of Space through the Process of Education« (R.A.V.E. Space), which was carried out as part of the Interreg IIIB CADSES program (Demšar Mitrovič et al. 2007a; Demšar Mitrovič et al. 2007b; Fridl et al. 2007).

This project relied upon the finding that appropriate spatial management may be more expensive in the short term, but that in the long run it is the only prudent option that will also provide material advantages in addition to other benefits (Kasimov et al. 2005). This is why raising people's awareness is of exceptional importance from all aspects of sustainable development. Working together with partners from abroad, who also introduced different views and approaches into our cultural circle, we used surveys to establish the current level of teachers' awareness, analyzed the inclusion of topics connected with sustainable spatial development in the learning processes in various European countries, outlined the education strategy for sustainable development, and focused on the preparation of teaching methods and techniques that should encourage students to change their behavior patterns and attitude towards space. We proceeded from the thesis that clear changes can be achieved even by introducing minor additions to the existing syllabus and supplementing ex-cathedra teaching with direct observation, perception, and sensation methods. This paper answers the question of how to implement these direct methods in order to take the first steps towards raising awareness.

Teacher seminars played an important role in studying the current state and checking the suitability of proposed teaching methods; these seminars first focused on analysis of established concepts – that is, participants' conceptual knowledge – and enriched it with perceptual knowledge obtained through carefully planned fieldwork reinforced with explanations. Teachers' established concepts about the area studied were determined through brainstorming. The goal was to influence their established mindsets through guided fieldwork in four areas (i.e., urban, suburban, rural, and protected) along the Slovenian coast, in which greater emphasis was placed on perceiving and comprehending spatial values and non-values. Because sight usually completely overrides all the other senses in observing space (Krivic 2008, 26), the participants were encouraged to perceive space through various senses. The teachers' task was to identify individual elements in space that are important within the context of the entire space or in their own right and that must be preserved, improved, or further developed in spatial development planning. Their task was not limited only to present situation, but encompassed also the past situation, so called geographic and social memory that play an important role in the development (Komac 2009).

The previous studies conducted as part of this project (Demšar Mitrovič et al. 2007a; Demšar Mitrovič et al. 2007b; Fridl et al. 2007) showed that education for sustainable development must especially be connected with spreading perceptual knowledge about spatial values, spatial problems and methods of resolving them, and the interconnectedness and mutual dependence of activities in space; at the same time, it must be oriented towards developing a responsible attitude towards space. Thus, after completing their education, primary and secondary school students should:

- Further develop their thought patterns;
- Understand that any lifestyle decision has direct or indirect consequences on space;
- Identify and evaluate the consequences of specific land use;
- Be aware of permanent consequences of these activities;
- Give some thought to resolving pressing spatial issues;
- Be familiar with the professions connected with development of the natural and built environment;
- Understand the importance and role of spatial planning and public participation in procedures for adopting land-use decisions;
- Develop a positive attitude towards their own roles in planning future development.

3 Comprehending space through spatial perception

People have extremely diverse views of space, which is why living in a space and using it creates many problems. Every individual and social group comprehends space in its own way and behaves in this space accordingly. This involves understanding the relationship between attitude and behavior. Attitudes, values, and beliefs define behavior (Zimmer et al. 1994). There is also a direct connection between the attitude

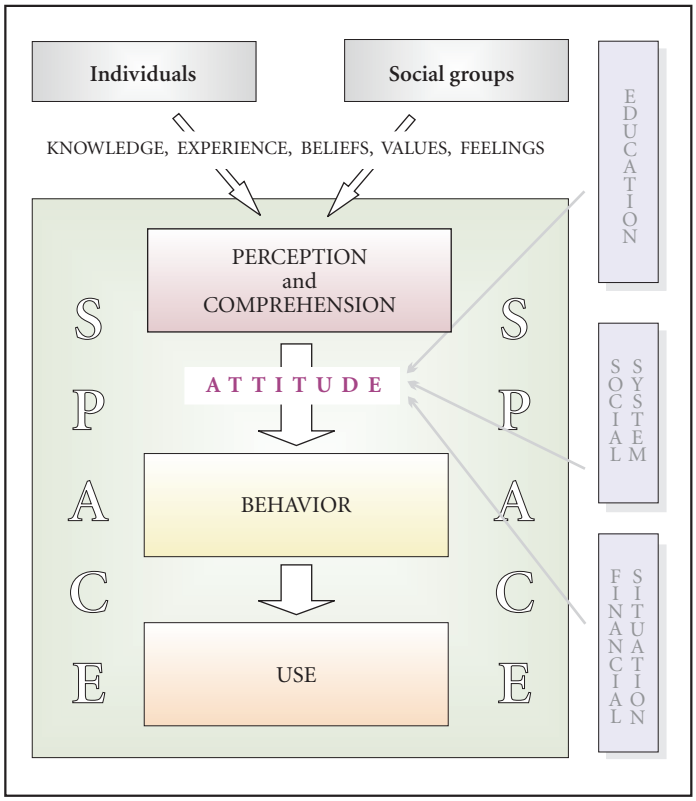

Figure 1: Factors and relationships between them affecting the role of individuals or social groups in the use of space.

towards space and behavior because a change in this attitude is also reflected in behavior (Bayard and Jolly 2008, 124). The basic feature of people's attitude towards space is that it continues to change similarly to how the understanding and explanation of space changes with changing experiences and life in specific cultural and historical circumstances. Among these circumstances, communism in particular is worth mentioning because this was a period in which prudent use of space and a responsible attitude towards it were not part of the public and personal attitude. Stanislaw Wierzbowski, who focuses on environmental issues in Poland, determined that communism distorted the perception and use of the environment and did not allow the Polish people to become sensitive to environmental problems (Wierzbowski 2005, 2). The situation was similar in communist Slovenia (Samsa 2003, 22).

We combined the findings of various authors described above and certain other published findings (Zimmer et al. 1994; Bayard and Jolly 2008, 124; Lewis 2005) into a logical whole and developed an improved model of factors and relationships between them that form at the level of people's use of space. Conceptual knowledge, experience, feelings, beliefs, and values of individuals or communities affect the perception and comprehension of space. Comprehension represents the way in which an individual or a community values and preserves spatial perceptions. People from various social and cultural backgrounds interpret and value the same space differently (Meinig 1979), in which their financial situation (Napier and Brown 1993) and education (Smrekar 2006) also play an important role. Spatial comprehension also differs between the outsiders that visit a specific place rarely or only have indirect information about it, and the insiders that live in a specific place or are in regular contact with it because of business or other activities. Space is thus more of a subjective construct than a material reality (Urbanc 2008, 322). Comprehending space affects the attitude that an individual establishes towards space. The number of ways in which space is comprehended corresponds to the number of various attitudes and interests, which do not always follow the principles of sustainable development.

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Figure 2: People live in a three-dimensional Euclidian physical geographical space and in the conceptual space of the noosphere. The word *noosphere* was introduced and defined by Vladimir Vernadsky, Teilhard de Chardin, and Edouard Le Roy (Oldfield and Shaw 2006, 148) as the product of human thought, consciousness, mental structure, and spatial comprehension.

People's everyday comprehension of reality proceeds from conceptual knowledge. This means that it depends on past experience and knowledge – that is, information people carry in their brains. In other words, people project their perception into the environment and see what they want to see (i.e., a top-down process). However, the picture of reality should primarily be the result of perceptual knowledge based on information obtained in the field (i.e., a bottom-up process; Gregory 1997, 1121). We believe that suitable education can influence the perception of space by making it part of individuals' mindset. It is therefore important to further develop and supplement the established concepts of space to achieve a more complete picture of reality. This will enable individuals to develop an active and critical attitude.

Comprehending space not only refers to comprehending physical reality, but also to understanding society (Sagan 2004, 141) and its spatial organization. In order to understand space as comprehensively as possible, all of its components must be taken into account. Space must be viewed as a place where social, economic, and environmental elements come together. The idea behind this view is based on the fact that the people's behavior depends more on how they comprehend space than on what this space is like in reality (Jordan-Bychkov and Domosh 1999, 21–22). The purpose here is to prove that comprehending space as a value must go beyond natural, heritage, and general civilization values, and focus on space as the arena of human existence.

Established stereotypes can be transcended only through carefully planned education. Space is not static, but primarily dynamic, and therefore its comprehension must also be constructed as a process. It has turned out that guided fieldwork, which opens new dimensions in the perception and comprehension of space, can be used to successfully build upon established concepts, which are based on past experience, knowledge, and feelings. This is why fieldwork is welcome in education and planning because it enables people to use all of their senses (not only sight) to transcend and further develop their existing concepts of the area studied.

4 Seminars: Selected methods of teaching the importance of space, and results

This study focused on the results of three seminars held in Portorož. They were designed such that brainstorming was first used to determine participants' conceptual knowledge of the area in which the seminar

took place. The participants were then introduced to the basic concepts connected with sustainable spatial development and the methods of presenting these topics in the classroom. Activities then continued in small groups, which performed practical fieldwork in the following four selected areas: the Lucija Marina, the Seča Peninsula, the Portorož airport and its surroundings, and the Sečovlje Salt Pans. These areas were not randomly selected because the goal was to establish whether there are any apparent differences in perceptions of urban, suburban, rural, and protected areas.

The seminars emphasized space as a limited commodity and prudent planning of its use, as well as specific teaching methods and tools that can be used to more effectively direct students towards identifying spatial values, proper environmental management, and comprehensive understanding of the causes and effects of human activities that affect the environment (Fridl and Urbanc 2008, 657).

4.1 Selecting the study area

There were two reasons that the town of Portorož and its surroundings was selected as the venue for the three two-day seminars. The first reason was connected with general knowledge of this area because teachers from all of the Slovenian primary and secondary schools were invited to attend. We anticipated that the majority of participants would have had more frequent contact with the Littoral region than with other parts of Slovenia and thus have already formed concepts of the area studied; this was to provide interesting and diverse answers in the study of conceptual views. The second reason for selecting this area is its appeal for organizing various activities. This is an area that has experienced rapid and dramatic changes in the past few decades (Urbanc 2007). Externally, these changes were reflected in intense construction and great pressure on the environment. Recently in particular, this area has been affected by severe conflicts of interest supported by capital. In this regard, the Sečovlje Salt Pans regional park must be highlighted. This park is a major Slovenian natural and cultural heritage site; nonetheless, there are some interests in expanding the airport and building a golf course at its edge. New land use and harmonizing it with existing natural features and interests of the population definitely poses a great challenge that demands carefully planned spatial development.

4.2 Selecting the seminar participants

Because spatial issues demand an interdisciplinary approach, our goal was to include teachers from various fields in the seminars. We invited all primary and secondary school teachers and principals to attend. Given the response received, this topic is of interest to teachers of various subjects (e.g., geography, history, sociology, philosophy, civic education, ethics, biology, civil engineering, chemistry, computer science, and economics). The results of the parallel national project *Vključevanje elementov trajnostnega prostorskega razvoja in vrednot prostora v izobraževalni process* (Including Elements of Sustainable Spatial Development and Spatial Values in Education) also confirmed that environmental topics are in fact addressed by various school subjects. They showed that topics connected with sustainable spatial development are closely connected with certain topics already taught in the subjects listed above. They only need to be improved from the perspective of sustainable spatial development. In general, it turned out that raising the awareness of young people will be most effective if this topic is addressed as part of interdisciplinary connections, especially as part of fieldtrips focusing on science, technology, and ecology.

4.3 Assessing teachers' conceptual knowledge through brainstorming

As part of the interactive workshop, brainstorming was used to more easily determine teachers' established concepts of the area studied. The goal was to encourage participants to recall their perceptions connected with the area studied and to simultaneously motivate them to participate in this activity in a spontaneous and relaxed manner. In order to prevent participants from answering all at once, which would have made the moderator's job more difficult, and to motivate certain participants, teachers were asked to jot down their spontaneous ideas on *Post-it®* notes when asked a specific question. They were asked three rounds of questions because the goal was to obtain a wide variety of various views and personal experiences. The questions were as follows:

MARKO ZAPLATIL

Figure 3: Using brainstorming to obtain teachers' conceptual views of space along the Slovenian coast.

- What do you think of first when you hear the word *Littoral*?
- What is your experience with this area?
- What do you usually do in this area?

The answers on the *Post-it*® notes were put on the board so that the entire group could read them. Then the moderator encouraged the participants to engage in further discussion by asking them »What do our concepts tell us and how can we divide them into logical groups?«

In all three seminars, a total of 235 perceptions were obtained using this method, representing 106 different impressions. In order to obtain a better overview of these perceptions, they were divided into four semantic groups. The first more obvious division took place according to the views of insiders and outsiders. The first group, which accounted for just over four percent of all perceptions, included perceptions that defined the selected area as home. In general, they reflect attachment to this area and clearly show that home is where family is. The concept of home is also connected with memories of youth and living in this area. In the outsider group, notably more varied perceptions predominated, which is why they were divided into three further groups. The second group included perceptions that defined this area geographically; it was labeled »Regional Features.« The third group included perceptions that revealed this area as a place of leisure activities, and the fourth included perceptions that reflected positive feelings about the area selected. In all of the last three groups, the number of perceptions was approximately the same; however, in the third and fourth groups, certain perceptions repeated several times.

In the second group, which contained perceptions that geographically defined the area selected, regional perceptions predominated (e.g., western Slovenia, a region by or near the sea, and areas along the Slovenian coast). The perception that appeared most frequently (22 times) was »the sea.« This clearly shows what the basic feature of this area is in people's minds. Other perceptions in this group referred to the climate (with an emphasis on the sun and sun exposure), types of vegetation (mostly olive trees), and individual

MILAN OROŽEN ADAMIČ

Figure 4: People perceive the sea as the main feature of the Littoral Region and at the same time the sea evokes a number of positive feelings in them.

towns (only Črni Kal, Piran, and Portorož were mentioned). As expected, in the third group, which highlights the area selected as a place for spending free time, ideas such as leave, time off, rest, and annual vacation predominated. Other notes in this group referred to more specific leisure activities, such as socializing, exploring, spending time at the beach, swimming, taking photographs, sightseeing, meditating, and sunbathing. In the fourth group, which combined positive sensations and feelings, three ideas largely predominated: relaxation, pleasure, and warmth. The others referred to beauty, friendliness, tasty food, health, and satisfaction. It is not surprising that the most frequent notions are also the basic defining elements of the cognition of the spatial extent of the Mediterranean in Slovenia (Staut et al 2007).

Many expressions that describe perceptions consist of several words. If broken down into individual words, 147 of a total of 311 are different. The word *sea* appears 28 times, and the words *pleasure* and *relaxation* appear 13 times, followed by the adjective *pleasant*, and the nouns *warmth*, *time off*, *exploring*, *vacation*, *rest*, and *sun*.

4.4 Supplementing conceptual knowledge with practical fieldwork

A south wind in a beech forest is different from the bora blowing through a pine woods; the park smells different in the fall than in the spring, and even the dullest street in town is different on a muggy summer day than during a snow flurry (Krivic 2008, 17)

The next step in the process of shaping spatial concepts was guided fieldwork oriented towards developing established concepts of outsiders, proceeding from an emotionally colored view to identifying concrete spatial elements and processes. The participants' movement in space enabled direct comprehension of its components and developing a more comprehensive view of space. In the field, the workshop participants primarily focused on perceiving concrete spatial values and non-values. They also recorded all of them: they marked the locations of the perceptions they collected or photographed on a map, and described their views in a special list. In each group, the participants expressed their opinions on their own per-

ceptions on an ongoing basis and harmonized them among themselves. In doing this, they ascribed specific meaning to their current perceptions, which could be referred to as »data« in information science terminology, and thus obtained new information on the space. If they entered the information obtained into their mindsets, this means they first and foremost increased their perceptual knowledge. In order to obtain as wide a variety of perceptions as possible, the heads of individual groups encouraged participants to engage in observation and discussion and to perceive things by using various senses, directed their conversation, and presented the area through literary texts.

In the field, the participants recorded their own perceptions and thoughts. At all three seminars, 193 perceptions were obtained, of which 126 were positive and 67 were negative. Comparing the ideas collected using brainstorming with the perceptions obtained through fieldwork, the latter are much more diverse. Compared to the former, which are more general, the perceptions obtained after returning from the field are much more specific; this confirmed our hypothesis that a positive attitude towards space must be built

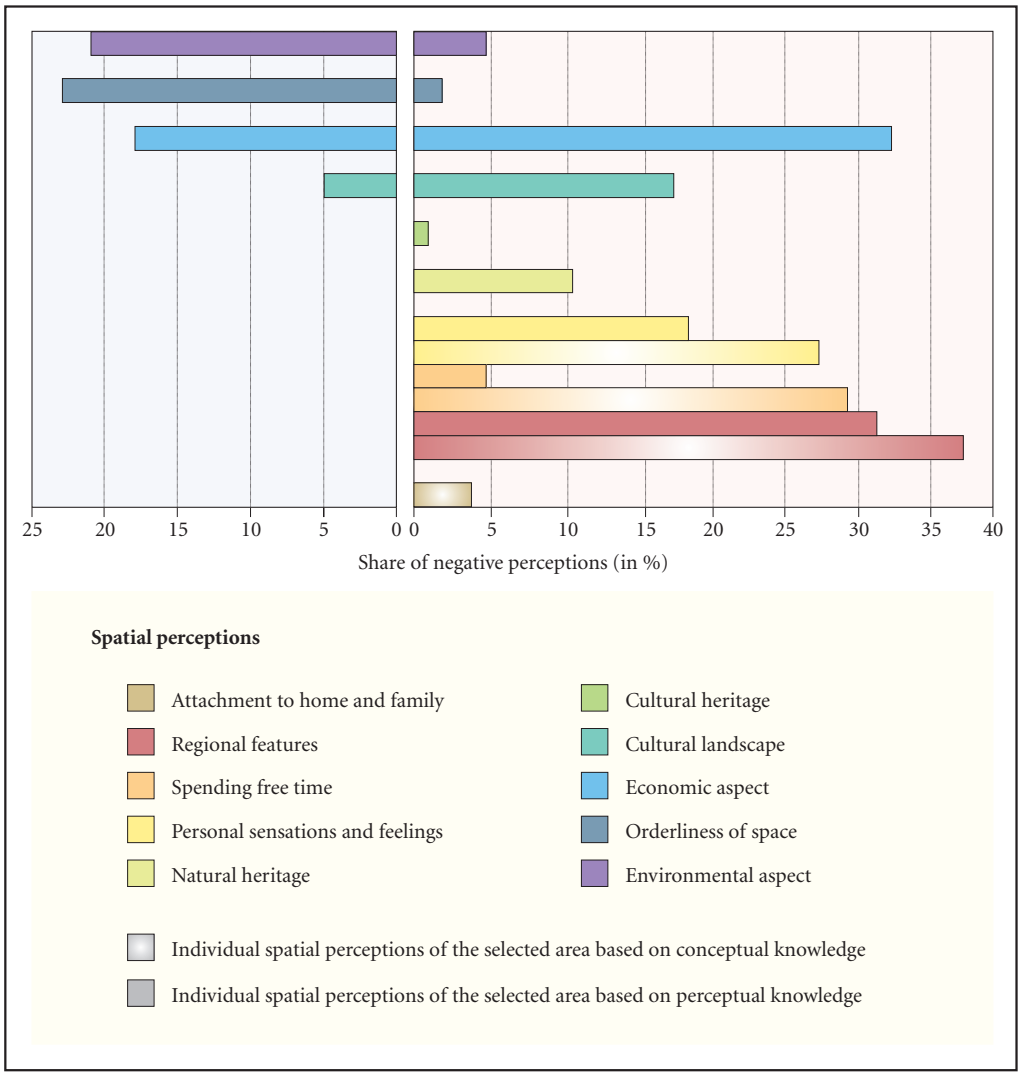

Figure 5: Comparison of selected spatial perceptions based on conceptual knowledge before the seminar and perceptual knowledge after guided fieldwork.

on perceptual knowledge. It is interesting that in brainstorming teachers only expressed positive perceptions of space, whereas on the fieldtrip negative perceptions even predominated in certain groups. In addition to the existing four groups of perceptions that were selected on the basis of the notes produced in brainstorming, six additional groups were defined according to the common features of spatial perceptions obtained through the fieldwork.

According to the share of perceptions obtained through fieldwork, only the group labeled »Regional Features« retained the same number of perceptions among the four existing groups, mostly thanks to Mediterranean vegetation, the sea, and certain geological forms. After the practical exercise, seminar participants ascribed considerably less importance to spending free time because they replaced the role of a tourist with the role of an active citizen in the spatial-planning process. It is therefore no coincidence that they began to recognize great economic development potential in the area studied, which was also reflected in the largest share of positive perceptions in the »Economic Aspect« group.

Perceptions connected with natural and cultural heritage predominated in the groups that visited the Sečovlje Salt Pans regional park. In terms of numbers, biodiversity was most often mentioned as the most important value of the park. Salt production, which left a strong mark in the landscape, also contributed a few perceptions, which were included under cultural landscape, although the Forma Viva open-air sculpture display on the hillside near Seča also played an important role in this group.

Two extremely important perceptions that did not appear during brainstorming, but that predominated among the negative perceptions after the fieldtrip, included the »environmental aspect« and »orderliness of space.« Both testify to the fact that in recent decades the ecological awareness of the Slovenian population has considerably increased and that people have become sensitive to various phenomena such as marine pollution, illegal dumping, noise, lack of waste separation, and untidiness of coastal areas and buildings.

The synthesis of field findings served as a starting point for further considerations of how to preserve or further develop certain values in the sustainable spatial development process and what kind of modifications to plan for this area, which is affected by environmental, economic, and social problems – or, in other words, which has limited opportunities to realize its functions. After the fieldtrip, the seminar participants were more aware of the various views and values that can be present in the same space, as

JERNEJA FRIDL

Figure 6: Teachers in the roles of the public and spatial planners, seeking the best location for setting up a group of kitchenette suites based on perceptions obtained through fieldwork and various interests of individual groups.

well as the fact that none of these can be excluded. A new category of perceptions appeared, which was not present while using the brainstorming method. During the fieldtrip, teachers began to realize that this is not merely a place that offers rest and recreation at the seaside, but also a place in which environmental and spatial problems such as waste, untidy beaches, deserted parts of salt pans, stench in the marina, architecture inappropriate for this area, and spatial overcrowding appear in addition to values that are the result of positive sensations. Thus some parts are mixed with opposing perceptions. The perceptions recorded after the fieldwork also show that none of the groups significantly deviated from the others in the number of perceptions and that developmental problems in the sense of economic development and environmental protection were evenly presented.

4.5 Planned role play

The following day we used a planned role-play method, in which the participants played the roles of the public and spatial planners. The goal of this method was to draw the participants' attention to specific problems that spatial planners encounter in their everyday work and the importance of including the public in spatial-planning processes. This method is very useful for identifying with various situations and roles or for discovering non-experiential types of behavior (Brečko 2002, 104). Based on the information and spatial perceptions that the participants obtained the day before, they had to find a suitable site for setting up a group of top-end kitchenette suites with the entire appertaining infrastructure. It turned out that in selecting the location they dedicated the greatest attention to preserving the spatial values perceived in the field. The »spatial planners« group communicated its proposals to the »public« groups and explained to them why it had selected the given location. They also had to explain what new spatial values the planned development would provide and what it would destroy. It turned out that individual values predominated among the »public,« whereas »spatial planners« ascribed greater importance to society values in planning spatial development. The participants performed this task with great commitment and surprised us with an overall interdisciplinary approach. This confirmed our assumption that teachers of all subjects must be included in education for sustainable development.

5 Conclusion

In Slovenia, individual and societal attitudes towards space, which is exposed to various interests on a daily basis, are not ideal (Internet 2). Planned education and upbringing are raising Slovenian environmental awareness (Internet 3). Slovenians are well aware of the problem of drinking-water pollution, the effects of air pollution, and the extinction of certain animal and plant species (Smrekar 2006). However, the majority would not include space among limited natural resources. Because a more responsible attitude towards the environment can be primarily built on knowledge, experience, beliefs, values, and emotions (Bayard and Jolly 2008), upbringing and education also play an important role in this. Appropriate education, which will lead to greater sensitivity to spatial issues and more responsible and mature attitudes towards the environment, must include the widest possible circles of the population. To this end, the Slovenian Ministry of the Environment and Spatial Planning took over coordination of the international R.A.V.E. Space project, which focused on education for sustainable development. The project ensured cooperation of a number of professionals and enriched and accelerated the exchange of experience among the participating countries (Poland, Montenegro, Italy, Greece, and Slovenia) through various educational processes and various social and cultural aspects. The desire of all those participating in this project was to connect the existing syllabus with new topics that would more effectively direct students towards identifying spatial values, proper environmental management, and comprehensive understanding of the causes and effects of human activities that affect the environment. Topics connected with space and spatial planning can be incorporated into all of the primary and secondary school grades and into many subjects, such as environmental and social studies, geography, history, art, biology, chemistry, and civic education.

Because knowledge can most effectively be transmitted to students through teachers, the more important activities of this project also included the organization and implementation of teacher seminars. The topics and methods presented in the series of seminars in Portorož represent an attempt to overcome the established comprehension of spatial perceptions and their incorporation into individuals' conceptual

networks. In the long run, a new approach to observing and evaluating space should change individuals' comprehension and thus influence their attitude towards space. A comparison between spatial perceptions that resulted exclusively from conceptual knowledge, and spatial perceptions obtained after a fieldtrip, which were also the result of perceptual knowledge, showed that work performed in the field is of great importance to broadening people's mindsets. A changed attitude towards space will manifest itself in changed behavior patterns within space, and indirectly also in its use. More prudent and sustainable use of space can only be achieved through responsible behavior. Teachers play an important role in achieving this because by presenting and addressing a number of already existing topics differently and by adding new ones they can broaden their students' horizons.

The problem with developing the attitude towards space and influencing this attitude is whether experimental and academic approaches can be directly transferred to classrooms. In the concluding discussions, the majority of teachers believed that this was possible and that diverse and interesting work methods would be a good motivation for their students. Classroom and field workshops, which were intended for interactive participation of teachers and which allowed teachers active experiential work and exchange of opinions, were especially well received. This was also confirmed by the teachers' committed and creative participation in the groups. They highlighted that, after the activities performed at the seminars, they began perceiving various interests, behavior, and problems in space differently and becoming more seriously aware of the role of active civic participation in spatial-planning processes. The seminar participants saw the main advantage of the topics and the methodological approaches presented as their »openness,« because, with minor adjustments, they could be used with various age groups, subjects, and locations. Teachers listed lack of time, inflexible syllabuses, and high costs of fieldwork as the main problems in implementing some or all of the activities presented. Nonetheless, the surveys revealed that the participants are already thinking about connecting certain topics with their subjects and changing their method of discussing certain topics.

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Pomen učiteljevega zaznavanja prostora v izobraževalnem procesu

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IZVLEČEK: Z naraščajočim gospodarskim razvojem, blaginjo prebivalcev evropskih držav in vse večjimi potrebami različnih dejavnosti se poleg okoljevarstvenih problemov povečujejo tudi pritiski na prostor. Te je mogoče omiliti le s skrbno premišljenim načrtovanjem rabe prostora, v katerega se mora poleg ustreznih služb aktivneje vključevati tudi javnost. Za uspešno vključevanje javnosti je pomembno, da se tako posamezniki kot družbene skupnosti zavedajo, da je prostor omejena dobrina, na katero so pritiski družbe in gospodarstva vse večji. Takšno zavedanje zahteva osveščene in izobražene prebivalce, ki bodo odnos do prostora gradili ne le na konceptualnem znanju, temveč to znanje v procesu izobraževanja nadgradili s perceptualnim znanjem. Aktivne, odgovorne in kritične državljane lahko vzgojijo le ustrezno izobraženi, osveščeni in motivirani učitelji. Ti lahko z novimi načini obravnavanja številnih že obstoječih vsebin in vpletanjem novih bistveno razširijo miselni svet učencev. To želimo tudi dokazati s člankom, ki govori o dojemanju prostora skozi prostorske zaznave, o nadgradnji ustaljenega konceptualnega znanja s terenskim delom in o možnosti apliciranja izbranih metod v učne procese. Cilj prizadevanj bo dosežen, ko se bodo posamezniki in družba zavedali, da je prostor naša skupna odgovornost in je zato treba čim prej spremeniti odnos do njega, če ga želimo v duhu trajnostnega razvoja ohraniti tudi za prihodnje rodove.

KLJUČNE BESEDE:
geografija, prostor, zaznavanje prostora, izobraževanje, trajnostni prostorski razvoj, Slovenija

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NASLOVI:
mag. Jerneja Fridl
Geografski inštitut Antona Melika ZRC SAZU
Gosposka ulica 13, 1000 Ljubljana, Slovenija
E-pošta: jerneja@zrc-sazu.si

dr. Mimi Urbanc
Geografski inštitut Antona Melika ZRC SAZU
Gosposka ulica 13, 1000 Ljubljana, Slovenija
E-pošta: mimi@zrc-sazu.si

Primož Pipan
Geografski inštitut Antona Melika ZRC SAZU
Gosposka ulica 13, 1000 Ljubljana, Slovenija
E-pošta: primoz.pipan@zrc-sazu.si

Vsebina

1 Uvod

Pereči okoljski, ekonomski in socialni problemi so v ospredje postavili izraz »trajnostni razvoj«, ki je postal stalnica različnih mednarodnih sporazumov in zakonodajnih dokumentov. Mnogi ga razumejo kot čudežno formulo, ki bo dolgoročno rešila nakopičene probleme človeštva. Vendar je pot do udejanjenja trajnostnega razvoja zelo dolga, odvisna pa je predvsem od stopnje gospodarske razvitosti, družbenega razvoja, političnega sistema posamezne države in ozaveščenosti ter izobraženosti njenih prebivalcev. Trajnostni razvoj je paradigma novega časa in v prvi vrsti zahteva poglobljeno poznavanje problemov in nove vzorce mišljenja strokovnjakov, ki načrtujejo prihodnji razvoj, odgovornih, ki sprejemajo in udejanjajo odločitve, in prebivalcev, ki s svojimi vsakodnevnimi navadami, razvadami in dejanji vplivajo na načrtovanje prihodnjega gospodarskega, družbenega in prostorskega razvoja. Proces trajnostnega razvoja se začne pri ljudeh in njihovem načinu življenja, ki je odvisen od dojemanja življenjskega prostora. Ljudje neposredno ali posredno vplivajo na rabo prostora, pri tem pa se premalo zavedajo, da je prostor omejena dobrina na katero se pritiski nenehno povečujejo (Urbanc in Fridl 2007). Dojemanje prostora je odvisno od številnih dejavnikov, med katerimi imata pomembno vlogo vzgoja in izobraževanje. Z izobraževanjem namreč želimo konceptualno znanje, ki prevladuje v naši oblikovani predstavi sveta, dopolniti s perceptualnim znanjem. Bistveno je namreč, da informacije, ki jih že nosimo v možganih (konceptualno znanje, ki smo si ga pridobili z izkustvi, družinskimi vzorci in predhodnim izobraževanjem) nadgradimo z informacijami, ki jih prejemamo iz okolice in dopolnimo omrežje znanja (perceptualno znanje). Samo tako lahko privzgojimo ljudem drugačen odnos do prostora ter nove vzorce razmišljanja in vedènja. Raziskovalno delo je bilo usmerjeno v analizo dejanskega stanja na področju izobraževanja za trajnostni prostorski razvoj ter v iskanje novih poti, kako vsebinsko in metodološko obogatiti izobraževalne procese, da bodo posamezniki in družba spremenili svoj odnos do prostora.

2 Pomen izobraževanja za trajnostni prostorski razvoj

V državah, ki se ponašajo z višjo stopnjo gospodarskega in socialnega razvoja kot Slovenija, dojemanje prostora ni samo akademska domena, ampak ima tudi praktično vrednost. Že desetletja se zavedamo, da je za doseganje trajnostnega razvoja treba pri načrtovanju in pri odločanju upoštevati ljudi in njihovo dojemanje življenjskega okolja. Še posebej je to pomembno v zadnjem času, ko se zaradi nazadovanja deleža kmečkega prebivalstva neposredna povezava med bližnjim življenjskim prostorom in ljudmi rahlja (Palang in ostali 2006, 355). Zato je potrebno najti nove poti za ohranjanje vezi med človekom in prostorom. Aktivnejše vključevanje v proces načrtovanja in odločanja je zagotovo eden izmed njih (Resnik Planinc 2008b, 27). Zaradi ideoloških razlogov, ki izvirajo iz časa socialistične Jugoslavije, in z njimi povezanega pristopa »od zgoraj navzdol«, je tradicija vključevanja javnosti v načrtovalski proces v Sloveniji kratka in slabo razvita. Da bi na tem področju dosegli spremembe na boljše, je treba začeti na začetku, torej pri vzgoji in izobraževanju ljudi. Z ozaveščanjem ljudi želimo doseči, da bodo dopolnili svoj pogled na prostor in postali bolj občutljivi in dovzetni za posege vanj, svoje poglede pa znali kritično predstaviti in utemeljiti v nekaterih postopkih prostorskega načrtovanja, kot so na primer zakonsko opredeljene javne razgrnitve, ali z neformalnim sodelovanjem javnosti v obliki delavnic, tribun, pogovorov (Kušar 2008, 40). Ozaveščanje o pravicah in dolžnostih posameznikov in družbenih skupin v procesu načrtovanja je torej temeljni predpogoj trajnostnega razvoja (Resnik Planinc 2008a, 56). Posebej bo učinkovito, če postane del izobraževalnega procesa že v osnovni šoli in se nadaljuje do najvišjih stopenj izobraževanja. Ključni so prav najmlajši, saj so najbolj dojemljivi za spreminjanje nazorov in vedenjskih vzorcev, hkrati pa bodo v nekaj letih prevzeli breme odgovornosti za prihodnji razvoj. Vpeljevanje novosti v šolski sistem se začne z izobraževanjem učiteljev, ki imajo v tem procesu ključno vlogo.

Ni torej naključje, da je Ekonomska komisija Organizacije združenih narodov za Evropo (angleško: *United Nations Economic Comission for Europe*), ki deluje v okviru Organizacije združenih narodov za izobraževanje, znanost in kulturo (angleško: *United Nations Educational, Scientific and Cultural Organisation* – UNESCO), obdobje med letoma 2005 in 2014 razglasila za »desetletje izobraževanja za trajnostni razvoj« (medmrežje 1). Na UNECE-jevo Strategijo izobraževanja za trajnostni razvoj, Evropske prostorske razvojne perspektive, Lizbonsko strategijo in podobne strateške dokumente smo se oprli tudi pri mednarodnem projektu Ozaveščanje o vrednotah prostora v izobraževalnem procesu (angleško: *Raising Awareness of Values*

of Space through the Process of Education), z akronimom R.A.V.E. Space, ki je potekal v okviru programa Interreg IIIB CADSES (Demšar Mitrovič in ostali 2007a; Demšar Mitrovič in ostali 2007b; Fridl in ostali 2007).

Projekt se je oprl na spoznanje, da je ustrezno ravnanje s prostorom na kratki rok morda dražje, na dolgi rok pa edina smiselna pot, ki bo poleg drugih prednosti prinesla tudi materialne prednosti (Kasimov in ostali 2005). Zato je ozaveščanje ljudi z vseh vidikov trajnostnega razvoja izrednega pomena. V sodelovanju s tujimi partnerji; ki so v naš kulturni krog prinesli tudi drugačne poglede in pristope, smo z anketiranjem ugotavljali trenutno stopnjo ozaveščenosti učiteljev, analizirali vpetost vsebin, povezanih s trajnostnim prostorskim razvojem, v učne procese v različnih evropskih državah, začrtali strategijo izobraževanja za trajnostni prostorski razvoj ter se osredotočili na pripravo metod in tehnik poučevanja, ki naj bi učence spodbujale k spreminjanju vedenjskih vzorcev ter odnosov do prostora. Izhajali smo iz teze, da lahko že z manjšimi dopolnitvami obstoječih učnih vsebin pri številnih predmetih in s popestritvijo frontalnega pouka z metodami neposrednega opazovanja, zaznavanja in občutenja dosežemo opazne spremembe. V prispevku želimo odgovoriti na vprašanje, kako omenjene neposredne metode izvesti, da naredimo prve korake k osveščanju.

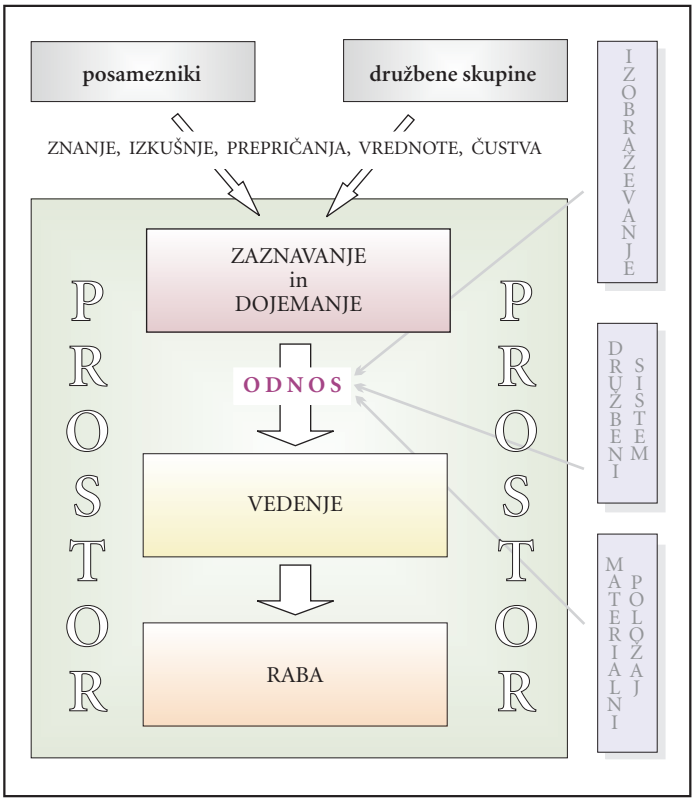
Pomembno vlogo so pri preučevanju stanja in pri preverjanju ustreznosti predlaganih načinov poučevanja odigrali seminarji za učitelje, na katerih smo se najprej osredotočili na analizo ustaljenih predstav, torej konceptualnega znanja udeležencev seminarja in ga s skrbno načrtovanim terenskim delom, podkrepljenim z razlagami, obogatili s perceptualnim znanjem. Ustaljene predstave učiteljev o preučevanem prostoru, smo ugotavljali s pomočjo metode burjenja duha (angleško *brainstorming*). Na usidrane miselne vzorce smo želeli vplivati z vodenim terenskim delom na štirih območjih (urbanem, suburbanem, ruralnem in varovanem) vzdolž slovenske obale, pri čemer smo večji poudarek namenili zaznavanju in dojemanju prostorskih vrednot in nevrednot. Ker pri opazovanju prostora vid največkrat povsem zasenči ostala čutila (Krivic 2008, 26), smo sodelujoče spodbujali k zaznavanju prostora z različnimi čutili. Naloga učiteljev je bila, da v prostoru prepoznajo posamezne prvine, ki so pomembne v kontekstu celotnega prostora ali same po sebi, in jih je treba v načrtovanju prostorskega razvoja ohraniti, izboljšati ali nadgraditi. Pri tem se niso omejili zgolj na sedanje stanje, ampak tudi na preteklo, na tako imenovani naravnogeografski in družbenogeografski spomin, ki sta zelo pomembna tudi za prihodnji razvoj (Komac 2009).

Predhodno izvedene raziskave v okviru omenjenega projekta (Demšar Mitrovič in ostali 2007a; Demšar Mitrovič in ostali 2007b; Fridl in ostali 2007) so pokazale, da mora biti izobraževanje za trajnostni razvoj povezano predvsem s širjenjem perceptualnega znanja o vrednotah prostora, o prostorskih problemih in načinih njihovega reševanja, o prepletenosti in medsebojni odvisnosti dejavnosti v prostoru, hkrati pa usmerjeno k razvijanju odgovornega odnosa do prostora. Tako naj bi učenci in dijaki po končanem šolanju:

- nadgradili obstoječe miselne vzorce;
- razumeli, da ima vsaka odločitev o načinu življenja posredne ali neposredne prostorske posledice;
- prepoznali in ovrednotili posledice določenih posegov v prostor;
- se zavedali trajnih posledic posegov v prostor;
- razmišljali o rešitvah perečih prostorskih problemov;
- spoznali poklice, ki so povezani z urejanjem naravnega in grajenega prostora;
- razumeli pomen in vlogo prostorskega načrtovanja ter sodelovanja javnosti v postopkih sprejemanja odločitev o posegih v prostor;
- razvili pozitiven odnos do lastne vloge pri načrtovanju prihodnjega razvoja.

3 Dojemanje prostora preko prostorskih zaznav

Ljudje imamo zelo različne poglede na prostor, zato življenje v njem in njegova raba sprožata veliko problemov. Vsak posameznik in vsaka družbena skupina dojemata prostor na njima lasten način in se v skladu s tem v prostoru tudi vedeta. Pri tem gre za razumevanje razmerja med držo (angleško *attitude*) oziroma odnosom in vedènjem (angleško *behaviour*). Drža, vrednote in prepričanja namreč določajo vedènje (Zimmer in ostali 1994). Obstaja tudi neposredna povezava med odnosom do prostora in vedènjem, saj se sprememba v odnosu do prostora odraža tudi v vedènju (Bayard in Jolly 2008, 124). Bistvo človekovega odnosa do prostora je, da se neprestano spreminja, kot se spreminja dojemanje in razlaganje prostora



Slika 1: Ponazoritev dejavnikov in razmerij med njimi, ki vplivajo na vlogo posameznikov ali družbenih skupin pri rabi prostora.

v skladu s spreminjajočimi se lastnimi izkušnjami ter z bivanjem v določenih kulturnih in zgodovinskih okoliščinah. Med slednjimi velja omeniti zlasti socializem/komunizem kot obdobje, v katerem smotrna raba prostora in odgovoren odnos do njega nista bila sestavni del javne in zasebne drže. Wierzbowski, ki se osredotoča na okoljske probleme na Poljskem, ugotavlja, da je komunizem izkrivil dojemanje in rabo okolja in pri Poljakih ni dovoljeval oblikovanja občutljivosti za okoljske probleme (Wierzbowski 2005, 2). Podobno je bilo tudi stanje v času socializma v Sloveniji (Samsa 2003, 22).

Navedene ugotovitve različnih avtorjev in nekatera objavljena spoznanja (Zimmer in ostali 1994; Bayard in Jolly 2008, 124; Lewis 2005) smo poskusili povezati v smiselno celoto in naredili popolnejši model dejavnikov in odnosov med njimi, ki se oblikujejo na relaciji ljudje-raba prostora. Konceptualno znanje, izkušnje, čustva, prepričanja in vrednote posameznikov ali skupnosti namreč vplivajo na zaznavanje in dojemanje prostora. Dojemanje je način, kako posameznik ali skupnost vrednoti in shranjuje zaznave prostora. Ljudje iz različnih družbenih in kulturnih okolij bodo isti prostor interpretirali in vrednotili različno (Meinig 1979), pri čemer pomembno vlogo igrata tudi gmotni položaj (Napier in Brown 1993) in izobrazba (Smrekar 2006). Dojemanje prostora je različno tudi med občasnimi uporabniki (angleško *outsiders)*, ki določen prostor obiskujejo redko, ali imajo o njem le posredne informacije, in rednimi uporabniki (angleško *insiders)*, ki v določenem prostoru bivajo ali so zaradi poslovnih in drugih dejavnosti z njim v nenehnem stiku. Prostor je torej bolj kot materialna stvarnost subjektivni konstrukt (Urbanc 2008, 322). Dojemanje prostora vpliva na to, kakšen odnos do prostora posameznik vzpostavi. Kolikor je načinov dojemanja prostora, toliko je tudi različnih odnosov in interesov, ki niso vselej v skladu z načeli trajnostnega razvoja.

Naše vsakdanje dojemanje realnosti izhaja iz konceptualnega znanja. To pomeni, da je odvisno od predhodnih izkušenj in znanj, torej od informacij, ki jih nosimo v možganih. Povedano drugače, zaznavo projiciramo v okolje in vidimo to, kar želimo videti (angleško *top-down process*). Prizadevati pa si moramo, da bo slika realnosti predvsem rezultat perceptualnega znanja, temelječega na terenu pridobljenih informacij (angleško *bottom-up process*) (Gregory 1997, 1121). Prepričani smo, da se da z ustreznim izo-

braževanjem vplivati na zaznave prostora tako, da bo ta postal del miselnega sveta posameznika. Zato je pomembno, da poskušamo že ustaljene predstave o prostoru nadgraditi in dopolniti tako, da bo slika realnosti popolnejša. To bo posamezniku omogočilo aktivno in kritično držo.

Razumevanje prostora ne pomeni le dojemanja fizične stvarnosti, ampak tudi razumevanje družbe (Sagan 2004, 141) in njene prostorske organizacije. Da bi prostor razumeli čim bolj celovito, moramo torej upoštevati vse njegove sestavine. Na prostor moramo gledati kot na poligon prepletanja družbenih, ekonomskih in okoljskih prvin. Ideja takšnega pogleda temelji na dejstvu, da je vedènje ljudi odvisno bolj od tega, kako dojemajo prostor, kot od tega, kakšen je dejansko prostor (Jordan-Bychkov in Domosh 1999, 21–22). Naš namen je dokazati, da mora razumevanje prostora kot vrednote presegati naravne, dediščinske, splošnocivilizacijske vrednote in se osredotočiti na prostor kot areno človekovega bivanja.

Ustaljene stereotipe lahko presežemo le s skrbno načrtovanim izobraževanjem. Prostor ni statičen, ampak predvsem dinamičen, zato mora biti tudi njegovo dojemanje proces. Izkazalo se je, da je mogoče z vodenim terenskim delom, ki odpre nove dimenzije zaznav in dojemanj prostora, uspešno nadgraditi že uveljavljene predstave, ki temeljijo na preteklih izkušnjah, znanju ali čustvih. Zato je v izobraževanju, vzgoji in načrtovanju terensko delo zelo zaželeno, saj nam omogoča, da s pomočjo vseh čutil (ne le vida) presežemo in nadgradimo obstoječe predstave o preučevanem prostoru.

Slika 2: Ljudje živimo v trirazsežnem evklidskem fizičnogeografskem prostoru kot tudi v konceptualnem prostoru noosfere. Slednja – termin so uvedli in ga znanstveno opredelili Vladimir Vernadsky, Teilhard de Chardin in Edouard Le Roy (Oldfield in Shaw 2006, 148) – je proizvod človekovega mišljenja in zavedanja ter miselne konstrukcije in dojemanja prostora.
Glej angleški del prispevka.

4 Izobraževalni seminarji: izbrane metode poučevanja o pomenu prostora in rezultati

V raziskavi se osredotočamo na rezultate treh seminarjev v Portorožu, ki smo jih zasnovali tako, da smo najprej z metodo burjenja duha ugotavljali konceptualno znanje udeležencev o prostoru, v katerem se je seminar odvijal. Nato smo jih seznanili z osnovnimi pojmi, povezanimi s trajnostnim prostorskim razvojem in učnimi metodami podajanja vsebin v razredu. Aktivnosti so se nadaljevale v manjših skupinah s praktičnim delom na terenu na štirih izbranih območjih: marina Lucija, polotok Seča, letališče Portorož z okolico in Sečoveljske soline. Našteta območja niso bila izbrana naključno. Želeli smo namreč ugotoviti, ali obstajajo očitne razlike med zaznavami v urbanem, suburbanem, ruralnem in varovanem prostoru.

Na seminarjih smo dali poudarek prostoru kot omejeni dobrini in smotrnemu načrtovanju njegove rabe ter nekaterim učnim metodam in učilom, s katerimi lahko učence in dijake učinkoviteje usmerjamo k prepoznavanju vrednot prostora, k pravilnemu ravnanju s prostorom in k celostnemu razumevanju vzrokov in posledic človekovih posegov vanj (Fridl in Urbanc 2008, 657).

4.1 Izbor območja preučevanja

Za izvedbo treh dvodnevnih seminarjev smo izbrali Portorož z okolico iz dveh pomembnih razlogov. Prvi je povezan s splošnim poznavanjem tega območja, saj so bili na seminar vabljeni učitelji iz vseh slovenskih osnovnih in srednjih šol. Predvidevali smo, da ima večina udeležencev pogostejše stike s Primorjem kakor z ostalimi deli Slovenije in zato izoblikovane določene predstave o preučevanem območju, kar naj bi pri preverjanju konceptualnih pogledov prineslo pestre in raznolike odgovore. Drugi razlog je privlačnost območja za umestitev različnih dejavnosti. Gre za prostor, ki je v zadnjih desetletjih doživljal hitre in dramatične spremembe (Urbanc 2007). Te so se navzven odražale v intenzivni gradnji in velikih pritiskih na prostor. Še zlasti v zadnjem času prihaja do hudih navzkrižij interesov v prostoru, za katerimi stoji kapital. Izpostavimo lahko krajinski park Sečoveljske soline, ki ga uvrščamo med pomembnejša območja naravne in kulturne dediščine v Sloveniji. Kljub temu se prav na njegovem obrobju pojavljajo interesi širjenja letaliških površin in postavitve igrišč za golf. Posegi v prostor ter njihovo usklajevanje z obstoječimi naravnimi danostmi in interesi prebivalcev so zagotovo velik izziv, ki zahteva premišljeno načrtovanje prostorskega razvoja.

4.2 Izbor udeležencev izobraževalnih seminarjev

Zavedamo se, da je treba k prostorskim problemom pristopati interdisciplinarno, zato smo si zastavili za cilj, da bi tudi izobraževanje zajelo učitelje z različnih strokovnih področij. K sodelovanju smo povabili vse učitelje in ravnatelje osnovnih in srednjih šol. Glede na odziv se je izkazalo, da se v tej temi prepoznajo učitelji različnih predmetov: geografije, zgodovine, sociologije, filozofije, državljanske vzgoje, etike, biologije, gradbeništva, kemije, računalništva in ekonomije. Da so prostorske vsebine tudi dejansko vpete v različne predmete, so potrdili tudi rezultati vzporednega nacionalnega projekta *Vključevanje elementov trajnostnega prostorskega razvoja in vrednot prostora v izobraževalni proces*, ki so pokazali, da so vsebine, ki se nanašajo na trajnostni prostorski razvoj tesno povezane z nekaterimi vsebinami, ki se že poučujejo pri prej naštetih predmetih. Treba jih bo le nadgraditi z vidika trajnostnega prostorskega razvoja. V splošnem se je izkazalo, da bo ozaveščanje mladih najbolj učinkovito, če se bo omenjena tematika obravnavala v sklopu medpredmetnega povezovanja, najprej v okviru naravoslovnih, tehniških ali ekoloških dni.

4.3 Preverjanje konceptualnega znanja učiteljev z metodo burjenja duha

V okviru interaktivne delavnice smo izvedli metodo burjenja duha, da bi si lažje ustvarili sliko, kakšne so ustaljene predstave učiteljev o obravnavanem območju. Želeli smo spodbuditi udeležence, da iz svojega spomina prikličejo zaznave, povezane z območjem preučevanja, in jih obenem usmeriti k neobremenjenemu in sproščenemu sodelovanju. Da bi se izognili hkratnemu odgovarjanju, ki mu moderator ne bi mogel slediti, ali pasivnosti nekaterih sodelujočih, so morali učitelji spontane domislice ob zastavljenem vprašanju vpisati na samolepilne lističe. Izvedeni so bili trije krogi vprašanj, saj smo želeli, da bi dobili večji nabor različnih pogledov in osebnih izkušenj. Zastavljena so bila naslednja vprašanja:

- Na kaj pomislite ob besedi »Primorje«?
- Kakšno izkušnjo imate v tem prostoru?
- Kaj počnete v tem prostoru?

Na lističih zapisane odgovore smo prilepili na tablo, tako da jih je lahko prebrala vsa skupina. Nato je moderator z vprašanjem: »Kaj nam naše predstave povedo in kako jih lahko strnemo v smiselne skupine?«, vzpodbudil udeležence k nadaljnji diskusiji.

Slika 3: Izvedba metode burjenja duha, ki naj bi razkrila konceptualne poglede učiteljev na prostor ob slovenski obali.
Glej angleški del prispevka.

V treh seminarjih smo z omenjeno metodo zbrali 235 zaznav, med njimi 106 različnih. Da bi dobili boljši pregled nad njimi, smo jih razvrstili v štiri pomenske skupine. Prva očitnejša delitev je bila delitev glede na pogled rednih uporabnikov in občasnih uporabnikov obravnavanega prostora. V prvi skupini, ki obsega zgolj dobre štiri odstotke vseh zaznav, so zaznave, ki izbrano območje opredeljujejo kot dom. V splošnem izražajo navezanost na prostor in jasno kažejo, da je dom tam, kjer je družina. Na pojem dom se navezujejo še spomini na mladost in bivanje v tem prostoru. V skupini občasnih uporabnikov obravnavanega prostora prevladujejo mnogo bolj raznovrstne zaznave, zato smo jih razvrstili v nadaljnje tri skupine. V drugi skupini so zaznave, ki izbrano območje opredeljujejo geografsko, in smo jo poimenovali »regionalne značilnosti«. V tretji so zaznave, ki razkrivajo to območje kot prostor prostočasnih dejavnosti in v četrti tiste, ki izražajo pozitivna čustva ljudi do izbranega območja. V vseh treh nazadnje omenjenih skupinah je število zaznav podobno, vendar se v tretji in četrti skupini nekatere zaznave večkrat ponovijo.

V drugi skupini zaznav, ki izbrano območje geografsko opredeljujejo, prevladujejo pokrajinske zaznave, kot so: zahodna Slovenija, regija ob morju, blizu morja, območja ob slovenski obali. Zaznava, ki se pojavi najpogosteje, in sicer kar 22-krat, pa je morje. To jasno kaže, kaj je v predstavah ljudi temeljna značilnost tega prostora. Ostale zaznave v tej skupini govorijo o podnebju (prevladuje poudarek na soncu, osončenosti), vrstah rastja (prevladuje oljka) in posameznih krajih (omenjeni so le Črni Kal, Piran in Portorož). V tretji skupini, ki izbrano območje izpostavi kot prostor za preživljanje prostega časa, po pričakovanju prevladujejo zaznamki, kot so dopust, oddih, počitek in počitnice. Ostali zaznamki v tej skupini natančneje opredeljujejo prostočasne dejavnosti: druženje, raziskovanje, kopanje, plavanje, fotografiranje, opazovanje, meditiranje, raziskovanje in sončenje. V četrti skupini, ki združuje pozitivna občutenja in čustva, močno prevladujejo trije zaznamki, in sicer sprostitev, užitek in toplina. Ostali govorijo o lepoti, prijaznosti, oku-

sni hrani, zdravju in zadovoljstvu. Kljub drugi metodi so Staut, Kovačič in Ogrin (2007) prišli do podobnih ugotovitev: podnebje, morje in rastlinstvo so glavni opredelitveni dejavniki Sredozemlja.

Veliko izrazov, ki opisujejo zaznave je večbesednih. Če jih razbijemo na posamezne besede, je od skupaj 311 besed kar 147 različnih. Izraz morje se pojavi 28-krat, 13-krat izraza užitek in sprostitev, sledijo pridevnik prijeten (prijetno, prijetna) ter samostalniki toplota, oddih, raziskovanje, dopust, počivanje in sonce.

Slika 4: Ljudje zaznavamo morje kot glavno značilnost Primorja, hkrati pa v nas vzbuja številna pozitivna čustva.
Glej angleški del prispevka.

4.4 **Dopolnjevanje konceptualnega znanja s praktičnim delom na terenu**

»… *Južni veter v bukovem gozdu je drugačen kot burja skozi borov gozdiček, jeseni park diši drugače kot spomlai in še celo najbolj enolična mestna ulica je v poletni sopari drugačna kot v snežnem metežu* …« (Krivic 2008, 17)

Naslednji korak v procesu oblikovanja prostorskih predstav je bilo vodeno terensko delo, ki je bilo usmerjeno v nadgrajevanje ustaljenih predstav občasnih obiskovalcev, in sicer od čustveno naravnanega pogleda k prepoznavanju konkretnih prostorskih prvin in procesov. Gibanje v prostoru je omogočilo neposredno dojemanje njegovih sestavin in oblikovanje celovitejšega pogleda na prostor. Na terenu so se udeleženci delavnice osredotočili predvsem na zaznavanje konkretnih prostorskih vrednot ali nevrednot. Vse so tudi evidentirali: lokacije zbranih ali fotografiranih zaznav so označili na karti, v posebnem popisnem listu pa opisali svoje poglede. Udeleženci vsake skupine so sproti izražali mnenja o lastnih zaznavah in jih med seboj usklajevali. S tem so trenutnim zaznavam, ki bi jih v jeziku informatike lahko poistovetili s podatki, dali določen pomen in tako dobili novo informacijo o prostoru. Če so dobljeno informacijo zabeležili v svoj miselni svet, lahko trdimo da so razširili predvsem perceptualno znanje. Da bi bila paleta zaznav čim obsežnejša in raznovrstna, smo vodje posameznih skupin udeležence spodbujali k opazovanju in razpravi, k zaznavanju z različnimi čutili, usmerjali pogovor in prostor predstavljali tudi prek leposlovnih besedil.

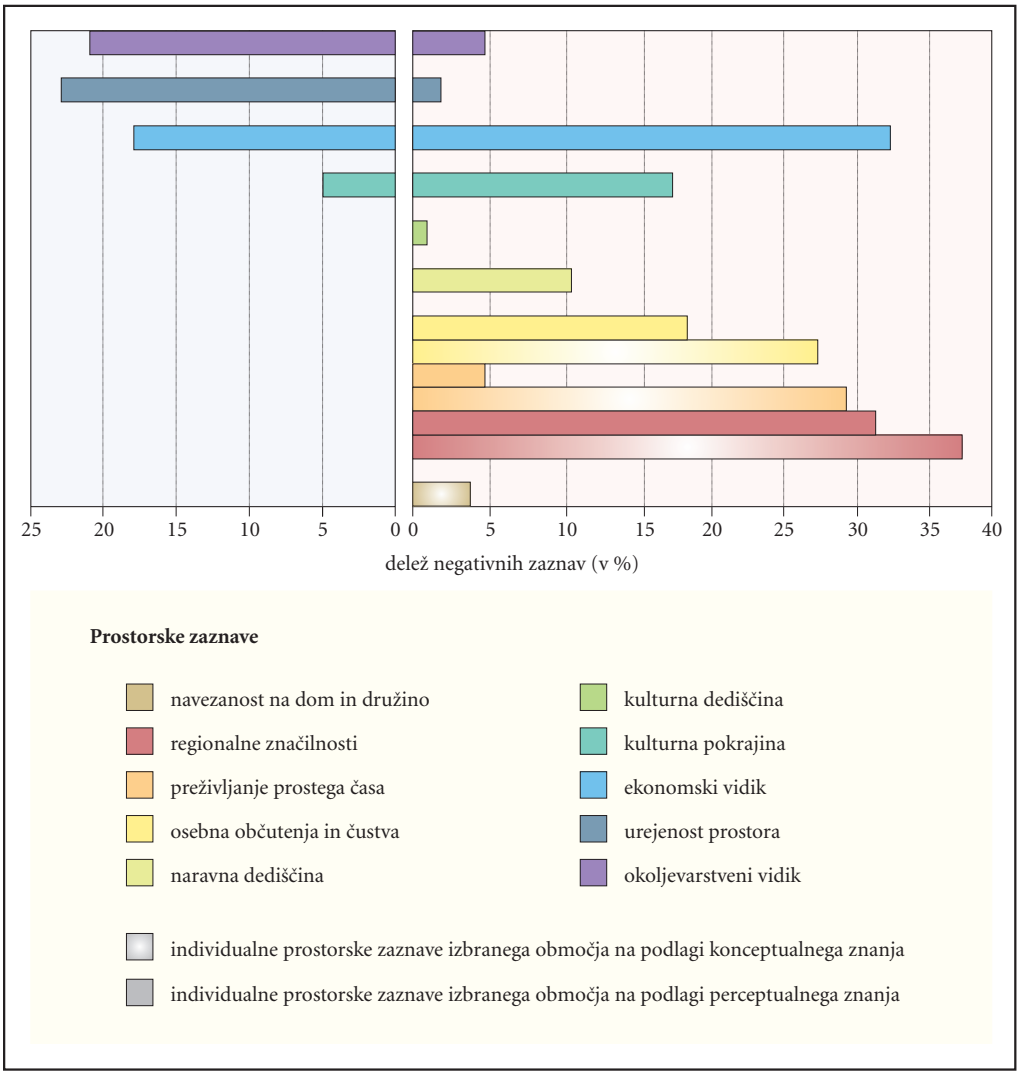
Na terenu so udeleženci beležili lastne zaznave in razmišljanja. Na treh seminarjih smo zbrali 193 zaznav, od tega 126 pozitivnih in 67 negativnih. Če primerjamo domislice, zbrane z metodo burjenja duha, z zaznavami, pridobljenimi s terenskim delom, so slednje mnogo bolj raznolike. Njihova lastnost je tudi, da so v primerjavi s prvimi, ki so bolj splošne, zaznave po prihodu s terena veliko bolj specifične, kar je potrdilo našo hipotezo, da je pozitiven odnos do prostora treba graditi na perceptualnem znanju. Zanimivo je, da so učitelji pri metodi burjenja duha izražali le pozitivne zaznave prostora, medtem ko so ob terenskem ogledu negativne zaznave v nekaterih tematskih skupinah celo prevladale. Poleg štirih že obstoječih skupin zaznav, ki smo jih izločili na podlagi zaznamkov metode burjenja duha, smo glede na skupne značilnosti prostorskih zaznav terenskega dela določili še dodatnih šest skupin.

Med štirimi že obstoječimi skupinami je glede na delež zaznav terenskega dela svoj obseg ohranila le skupina »regionalne značilnosti«, predvsem na račun mediteranskega rastja, morja in nekaterih geoloških oblik. Bistveno manjši pomen so udeleženci seminarja po praktičnem delu pripisali preživljanju prostega časa, saj so vlogo turista zamenjali z vlogo aktivnega državljana v procesu prostorskega načrtovanja. Zato ni naključje, da so v preučevanem prostoru začeli prepoznavati velik potencial za gospodarski razvoj, kar se odraža v največjem deležu pozitivnih zaznav v skupini »ekonomski vidik«.

Zaznave, ki se dotikajo naravne in kulturne dediščine, so bistveno prevladovale v skupinah, ki so obiskale Krajinski park Sečoveljske soline. Številčno se največkrat omenja biodiverziteta, kot najpomembnejša vrednota parka. Solinarstvo, ki je pustilo pomemben pečat v pokrajini, je prispevalo tudi nekaj zaznav, ki smo jih uvrstili v kulturno pokrajino, čeprav je v tej skupini pomembno vlogo odigrala tudi Forma viva na pobočju Seče.

Dve zelo pomembni skupini zaznav, ki se pri ugotavljanju konceptualnega znanja z metodo burjenja duha nista pojavili, po terenskem ogledu pa sta z negativnimi zaznavami prevladali, sta »okoljevarstveni vidik« in »urejenost prostora«. Oboje priča o tem, da se je ekološka osveščenost prebivalcev v Sloveniji v zadnjih letih precej dvignila in so postali občutljivi za različne pojave, kot so onesnaženost morja, divja odlagališča, hrup, neurejeno ločevanje odpadkov ter neurejenost obale in nekaterih stavb.

Sinteza terenskih spoznanj je služila kot izhodišče za nadaljnja razmišljanja, kako v procesu trajnostnega prostorskega načrtovanja določene vrednote ohraniti ali nagraditi in kakšne posege predvideti za prostor, ki se sooča z okoljevarstvenimi, gospodarskimi ali socialnimi težavami, oziroma so okrnjene možnosti uresničevanja njegovih funkcij. Po terenskem ogledu so se udeleženci seminarjev v večji meri zavedali različnih pogledov in vrednot, ki so lahko prisotne v istem prostoru, kakor tudi dejstva, da nobene od njih



Slika 5: Primerjava nabora prostorskih zaznav na podlagi konceptualnega znanja pred seminarjem in perceptualnega znanja po vodenem terenskem delu.

ni mogoče izključevati. Pojavi se nova kategorija zaznav, ki pri metodi burjenja duha ni bila opazna. Ob terenskem ogledu so se namreč učitelji začeli zavedati, da to ni le prostor za oddih in rekreacijo ob morju, temveč prostor, v katerem se poleg vrednot, ki so rezultat pozitivnih občutenj, pojavljajo še okoljevarstveni in prostorski problemi, kot so odpadki, neurejenost plaže, opuščenost določenih delov solin, smrad v marini, prostoru neprimerna arhitektura in prenasičenost prostora. Tako se na nekaterih predelih prepletajo nasprotujoče si zaznave. Zabeležene zaznave po terenskem delu tudi kažejo, da nobena izmed skupin po številčnosti zaznav bistveno ne odstopa od drugih in da so razvojne dileme v smislu ekonomskega razvoja ali zaščite prostora uravnoteženo zastopane.

4.5 Načrtno preigravanje vlog

Z metodo načrtnega preigravanja vlog javnost – prostorski načrtovalci, ki smo jo izvedli naslednji dan, smo želeli udeležence opozoriti na nekatere probleme, s katerimi se pri vsakodnevnem delu srečujejo snoval-

ci prostorskega razvoja, in na pomen vključevanja javnosti v procese prostorskega načrtovanja. Metoda je zelo uporabna za vživljanje v različne situacije in vloge, oziroma za odkrivanje neizkustvenih načinov vedènja (Brečko 2002, 104). Na podlagi informacij in prostorskih zaznav, ki so jih udeleženci pridobili prejšnji dan, so morali poiskati ustrezen prostor za postavitev apartmajskega naselja visoke kategorije z vso pripadajočo infrastrukturo. Izkazalo se je, da so največjo pozornost pri izbiri lokacije posvetili ohranjanju na terenu zaznanih prostorskih vrednot. Skupina »prostorskih načrtovalcev« je drugim skupinam »javnosti« poročala o svojih predlogih ter jim pojasnila, zakaj se je odločila za predstavljeno lokacijo. Razložiti so tudi morali, katere nove prostorske vrednote bo načrtovani poseg prinesel, katere pa bodo z njim uničene. Pri tem se je izkazalo, da pri »javnosti« prevladujejo individualne vrednote, »prostorski načrtovalci« pa pri načrtovanju prostorskega razvoja pripisujejo večji pomen vrednotam družbe. Udeleženci so zastavljeno nalogo opravili zelo zavzeto in presenetili s celovitim interdisciplinarnim pristopom. To je potrdilo našo predpostavko, da je treba v izobraževanje za trajnostni razvoj vključiti učitelje vseh predmetov.

Slika 6: Učitelji v vlogi javnosti in prostorskih načrtovalcev, ko na podlagi zaznav terenskega dela in različnih interesov posameznih skupin iščejo najprimernejšo lokacijo za umestitev apartmajskega naselja.
Glej angleški del prispevka.

5 Sklep

Odnos posameznikov in družbe do prostora, ki je vsakodnevno izpostavljen različnim interesom, v Sloveniji ni najboljši (medmrežje 2). Zaradi načrtno usmerjenega izobraževanja in vzgoje se dviguje okoljevarstvena zavest prebivalcev Slovenije (medmrežje 3). Dobro se namreč zavedajo problema onesnaženosti pitne vode, posledic onesnaževanja zraka ali problema izginjanja nekaterih živalskih in rastlinskih vrst (Smrekar 2006). Povečini pa med omejene naravne vire ne bi umestili prostora. Ker lahko odgovornejši odnos do prostora gradimo predvsem na znanju, izkušnjah, prepričanjih, vrednotah in čustvih (Bayard in Jolly 2008;) imata pomembno vlogo pri tem tudi vzgoja in izobraževanje. Z ustreznim izobraževanjem, ki bo vodilo k večji občutljivosti za prostorska vprašanja in k odgovornejšemu ter zrelejšemu odnosu do prostora, je treba zajeti čim širši krog prebivalcev. Zato je Ministrstvo za okolje in prostor Republike Slovenije prevzelo vodenje mednarodnega projekta R.A.V.E. Space, ki se je osredotočil na izobraževanje za trajnostni prostorski razvoj. S tem so si zagotovili sodelovanje številnih strokovnjakov in obogatili ter pospešili izmenjavo izkušenj med državami, partnerkami v projektu (Poljska, Črna Gora, Italija, Grčija, Slovenija), z različnimi izobraževalnimi procesi ter različnimi socialnimi in kulturnimi danostmi. Želja sodelujočih pri projektu je bila, da bi obstoječe učne vsebine prepletli z nekaterimi novimi vsebinami, ki bi učence učinkoviteje usmerjale k prepoznavanju vrednot prostora, k pravilnemu ravnanju s prostorom in k celostnemu razumevanju vzrokov in posledic posegov človeka v prostor. Teme, povezane s prostorom in njegovim načrtovanjem, se lahko vključijo v vse letnike osnovnih in srednjih šol in v številne predmete, kot so spoznavanje okolja, družba, geografija, zgodovina, likovni pouk, biologija, kemija in državljanska vzgoja.

Ker znanje učencem najučinkoviteje posredujemo prek učiteljev, je bila ena od pomembnejših dejavnosti projekta tudi organizacija in izvedba seminarjev za učitelje. Predstavljene vsebine in metode, izvedene v nizu seminarjev v Portorožu, pomenijo poskus preraščanja ustaljenega dojemanja prostorskih zaznav in njihovo vgrajevanje v konceptualna omrežja posameznikov. Nov pristop k opazovanju in vrednotenju prostora naj bi dolgoročno spremenil posameznikovo dojemanje in s tem vplival na njegov odnos do prostora. Primerjava zaznav prostora, ki so bile rezultat le konceptualnega znanja z zaznavami prostora po terenskem ogledu, ki so bile rezultat tudi perceptualnega znanja, je pokazala, da je delo v prostoru samem velikega pomena za širjenje našega miselnega sveta. Spremenjen odnos do prostora se bo pokazal v spremenjenih načinih vedènja/obnašanja v prostoru, posredno pa v njegovi rabi. Samo z odgovornim vedènjem bomo torej dosegli smotrnejšo rabo prostora, ki bo trajnostno usmerjena. Pri tem imajo učitelji pomembno vlogo, saj lahko z drugačnim obravnavanjem številnih že obstoječih vsebin in vpletanjem novih razširijo miselni svet učencev.

Pri oblikovanju odnosa do prostora in pri vplivanju na ta odnos se pojavi problem, ali lahko eksperimentalne in znanstvene pristope neposredno prenesemo v učilnice. Večinsko mnenje učiteljev v zaključnih diskusijah je bilo, da je to mogoče in bodo raznolike in zanimive metode dela dobra motivacija za učence. Posebej dobro so bile ocenjene delavnice v učilnici in na terenu, ki so bile namenjene interaktivnemu sodelovanju učiteljev, kar jim je omogočilo aktivno-izkustveno delo in izražanje mnenj. O tem priča tudi

njihovo zavzeto in kreativno sodelovanje v skupinah. Posebej so izpostavili, da so po izvedenih dejavnostih na seminarjih, začeli drugače gledati na različne interese, obnašanje in probleme v prostoru in se resneje zavedati vloge aktivnega državljanstva v procesu prostorskega načrtovanja. Udeleženci seminarjev so videli prednosti obravnavanih vsebin in metodoloških pristopov predvsem v njihovi »odprtosti« saj naj bi bile z manjšimi prilagoditvami uporabne za različne starostne skupine, predmete in lokacije. Kot težavo pri implementaciji nekaterih ali vseh predstavljenih dejavnosti so učitelji navajali predvsem pomanjkanje časa, neprilagodljivost učnih programov in stroške za terensko delo. Kljub temu je bilo iz vprašalnikov razvidno, da udeleženci že razmišljajo o povezavi določenih vsebin z njihovimi predmeti in o spremenjenih načinih obravnavanja nekaterih tematik.

6 Literatura

Glej angleški del prispevka.