

# On learning spaces. Insights into relationship between learning processes and space in the context of educational leadership

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## **Abstract**

The aim of the article is to reflect on the relevance of space in educational, including learning, processes. From the perspective of educational leadership, so strongly focused on learning processes and their effectiveness, it seems to be a vital reflection. Relationship between learning processes and space gradually draws attention of scholars from different disciplines. This attention is being generated by new trends in space design, flow of funds for infrastructure modernization and, within social science and humanities, a spatial turn. However, the very nature of the relationship is still under discussion and depending on a perspective is being understood differently. For in-

stance, it is not clear how redesigning of educational institutions affects learning and social relations within these very institutions and how to study this influence.

The article is divided into two parts: the part one focuses on theoretical issues related to the problem under scrutiny, the part two depicts and discusses methodological problems connected to studying impact of space on educational and learning processes, and its relevance for educational leadership in terms of influence, vision and values.

## **Keywords:**

learning spaces, education, spatial turn

<sup>1</sup> The terms 'headteacher', 'deputy headteacher' and 'headship' will be used when referring to the research conducted in the UK; elsewhere the terms 'principal', 'vice principal' and 'principalship' are used.

## Introduction

Relationship between learning processes and space gradually draws attention of scholars from different disciplines. It seems that it may be especially important from the perspective of educational leadership, so strongly focused on learning processes and their effectiveness (McBeath, Dempster, 2009; Mazurkiewicz, 2011). This attention may be understood as a result of at least three factors: (1) transformations of learning spaces resulting from new design modes (for instance, open spaces, shared facilities, places for formal and informal learning, community spaces within educational and cultural institutions, e.g. cultural centers) and new technologies being introduced into learning practices (which affect the very nature of learning but also transform space of educational institutions), (2) funds provided by different institutions (both governmental and non-governmental) for improvements of learning processes by changing physical settings or simply redesigning of learning spaces, (3) the spatial turn in social sciences and humanities, hence, a transdisciplinary recognition of space not as a passive background but as an active component (in terms of semiotics, experience and materiality) of social relations.

Scholars highlight that relevance of space in educational processes is still to be understood, interpreted and evaluated (for instance Boddington, Boys 2011). For instance, it is not clear how rede-

signing of educational institutions affects learning and social relations within these very institutions and how to study this influence.

This paper focuses on theoretical and methodological aspects of relationship between learning processes and space. In the part one, I concentrate on theoretical layer of the issue, while in the second, I recapitulate selected models of evaluation of learning spaces. The third part of the text is devoted to reflections on relevance of space and learning spaces in terms of educational leadership.

## Taking space into foreground

Last decades of the XXth century in humanities and social sciences theories are marked by increased interest in space which finally took form of the spatial turn. One of the precursors of the turn was Michel Foucault who in 1967 published an essay “Des Espace Autres” (1984), in which he defined the XIXth century as focused on temporal dimension, where the following century, within which we still inhabit, concentrates on spatial issues, spatial orders, and relations: “The great obsession of the nineteenth century was, as we know, history: with its themes of development and of suspension, of crisis, and cycle, themes of the ever-accumulating past, with its great preponderance of dead men and the menacing glaciation of the world [...] The present epoch will perhaps be above all the epoch of space. We are in the epoch of simultaneity: we are

in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed. We are at a moment, I believe, when our experience of the world is less that of a long life developing through time than that of a network that connects points and intersects with its own skein” (Foucault 1984, p. 1). Differently speaking, Foucault claims that the increased interest in space has not resulted from theoretical discussions but is deeply rooted in the characteristics of an epoch, of an episteme. For instance, “In the UK, the first decade of the new millennium saw significant public investment in the physical and digital spaces and educational infrastructure of universities, colleges and related environments. In turn this stimulated a growing interest in the re-examination of learning and the spaces in which learning takes place” (Boddington, Boys 2011, p. xi). This observation – according to Foucault – is more general. I refer here to Boddington’s and Boys’ critical reader on learning spaces because the following text touches upon a problem of learning spaces but also because they broader remarks on the status of space today. Investments in public spaces are obvious for European Union which provides great amount of money for infrastructure, meaning space transformations. We see it clearly in the Polish context. But from the theoretical point of view it is not clear how changes of space influence on social relation and culture, and how to assess, to measure, to interpret (referring to different paradigms: evaluation, positivist and

hermeneutic) these spatial transformations. As Boddington and Boys highlight referring to learning spaces but again it may be read as a broader remark: “This has opened up interesting questions, first, about the lack of any theoretical understanding as to how such spaces should be conceived or designed [...] It has also revealed a lack of effective frameworks for on learning and research” (p. xi-xii). Hence, governmental and non-governmental institutions invest in space but how it ‘invests’ back?

The spatial turn is devoted to assess, measure and interpret this influence. Shortly speaking, it introduces concepts that treat space not as a passive background but as an active one. For instance, in sociological theories the focus is on how subjects influence, change, and use physical objects and space. Objects and space are understood as passive, meaning they are being analyzed as something produced, fabricated, shaped, created, as vehicles of meanings ascribed to them by subjects. The revers aspect – how they influence individuals is neglected. This is a reducing perspective because both individuals and objects influence each others the individuals affect the things but also things affect the individuals, by constituting an important component of dynamic relation.

How to take space into foreground? How to take space into consideration and show how it affects individuals’ and groups’ actions? We may present at least three approaches to this problem. How-

ever space is vogue concept because it is something more than objects – rather their constellation of objects which operates on the level of materiality and on the level of meanings ascribed to it and decoded by humans. Space as a foreground factor may be understood in at least three different ways.

Semiotic approach aims at reading space – space is understood as meaningful, hence, space and objects within it have meanings. Questions: what space means? How these meanings influence social relations and learning processes? For instance, how students understand school (as “our” or “their”) affect how they act within in (engaging more or less in school activities). This is Roland Barthes (2009) who developed semiotics as a study of signs.

Perception or phenomenological approach – space is understood as something being perceived, experienced by individuals. Questions: how space is being perceived? How these perceptions influence social relations and learning processes? For instance, how students perceive school (as “safe” or “unsafe”) affect how they act within in (engaging more or less in school activities). This approach is founded on phenomenology which underlines that interacting with the world is mediated through the senses, not just the mind (ascribing meaning is taking place through mind engagements as in semiotics). According to Maurice Merleau-Ponty the physical body connects the world by motional and perceptive

interactions with objects – humans are anchored in the world by their flesh not only by their minds. Space and objects are being incorporated or embodied: “to be a body is to be connected with some world; at the beginning our body is not in the space but with the space instead” (Merleau-Ponty, 2001, p. 169). Because the whole process takes place besides consciousness (it is about body not mind) it provides methodological challenges on how to study these processes. We cannot simply ask individuals about this dimension of their social activity because large parts of it are beyond consciousness. This does not mean that it cannot be articulated – yes, it can. It is why such methods as participant observation and other ethnographic methods (including a photo-elicitation interview) are helpful here. Another problem is related to the very nature of experience, since “different individuals’ experience of embodiment within particular settings, and their perception and response of the same settings may differ considerably, reflecting differences in age, gender, personality, physical characteristics and cultural and social experience” (Melhiush, 2011, p. 23).

Material approach aims at understanding space as active in social relations in terms of its material features, not meanings and experiences. For instance, Bruno Latour talks about nonhuman actors who shape everyday practices similar to human actors. Within his text from 1992 “Where are the missing masses?” he provides an example of a hinge

(a mechanism that closes door) - a small object which do a lot of work. Because of a hinge you don't have to force people to close door which means that you do not have to spend time, money and energy to keep the door closed (closed because of cultural or security reasons). Invention of a hinge may be understood as a delegation of work and discipline on this very object. Differently speaking, a hinge does its work in terms of culture (keeping private space private), security (limiting access), and in terms of economy (you don't have to watch to keep the door closed). According to Latour both human and nonhuman actors contribute to how the social reality is constructed and how it works. Linking it with learning, one may say that learning is shaped not only by attitudes, cultural (including gender) patterns or economic determinants but also material conditions. Place where one study and objects which are present in this very place influence learning practices and its outcomes.

### **Space + learning = learning spaces**

Recognizing relevance of space in reference to learning may be understood as taking into consideration of what space means, how it is experience and how it affects individuals and groups because of its very materiality. It means that learning is to be treated as embodied and situated practice which takes place in physical settings to which groups and individuals

ascribe meanings and which they experience. Hence, different scholars, for instance Boddington and Boys, propose to talk about learning space in order to highlight this bodily and spatial dimension of learning. As they state: "learning spaces are not so much a matter of aesthetics or innovative design, as about the processes of learning, teaching and research and the ways in which relationships between these are categorized, organized and connected (that is, in what is 'named' and identified and what is not; what is revealed, what is kept together and what is disaggregated and dispersed) both conceptually and materially" (p. xii-xiii). And this is embedded in growing number of publications. As Boddington and Boys recapitulate, "In educational theory, learning spaces are increasingly understood as moments of transition between different states of learning, with many boundaries and thresholds to be negotiated (Meyer and Land, 2006; Lave and Wenger, 1991; Wenger, 1998). Many essays therefore explore how students (and staff) can both be supported in their learning journeys and enabled to take risks; and how both conceptual and material space is implicated in that process" (p. xx).

Although scholars agree that space matters, question on influence of physical space on learning is an aspect neglected by theories of learning (Blight, Pearshouse 2011: 3). It is not obvious how to study it, and – what is even more complex – how to evaluate its influence on learning processes.

## Evaluating learning spaces

Broad investments into learning spaces in European Union, including Poland, raise questions on influence of modernized spaces on learning processes. Brett Blight and Ian Pearshouse (2011) provide typology of learning space evaluations which I will recapitulate here. According to them there are five types of evaluation of learning space.

Demand model and satisfaction model may be linked with perception or phenomenology approach introduced above. Demand model focused on “quantitative analysis of conventional space metrics (occupant density, booking statistics), or financial income (external bookings, internal market calculations), etc.” (ibidem, p. 6), which may be operationalized to questions of “what size of estate is affordable, whether resources deployed in support of under-consumed space should be re-directed, and the opportunity costs of supporting inefficient spaces” (ibidem, s. 7) (SMG, 2006, p. 3), while satisfaction model is about “collecting data about the experiences and satisfaction of space users” (Blight, Pearshouse 2011, p. 6). Brand model aims at “evaluating spaces’ contribution to institutional image, as projected to entities including media, external partners, prospective and current students and staff, etc.

” (ibidem, p. 6). Hence, it is a type of semiotics approach to space. Outcomes model elaborates material layer of space – it evaluates “changes in learning outcomes” (Blight, Pearshouse 2011, p. 6), so how learning spaces in terms of their physical fabric affect learning outcomes. Blight and Pearshouse claim that this model is difficult because it is very complicated to isolate material characteristics of space from meanings and experiences, yet researchers seek to evaluate this layer. “Brooks isolates the effects of space by controlling (keeping constant) confounding factors such as time of day, course materials, assignments, instructor behaviour, and so on and is thus able to demonstrate a statistically significant difference between the predicted and actually achieved grades of different groups of students whose teaching occurred in two classrooms with different designs” (ibidem, p. 8).

Blight and Pearshouse present three more models but it is hard to link them with the three approaches to space, since they refer to selected elements of the approaches. Scenario provision model examines “space provision (technology, configuration, size, etc.), in light of judgments about the activities which need to be supported” (Blight, Pearshouse 2011, p. 6). This model “usually involves in practice is making judgments about which activities (scenarios) a space needs to sup-

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<sup>2</sup> There is slippage in the terms used - vice or assistant principal or deputy headteacher are used variously to describe the role of the next most senior leader after the principal or headteacher.

port and ensuring that the space, its contents (furniture, technology) and its basic infrastructure are appropriate for such activities – and, in some cases, keeping logs of the activities which occur in the room over time” (ibidem, p. 10). Activity support model touches upon activities taking place in a selected space, conducting studies usually by the use of observation-based methods. “This often involves mapping back to physical and cultural affordances (for example the configurations of students, teachers and machines within space, or how the social identities of the actors within the space are understood by those present), as opposed to Scenario Provision LS·e, which establishes activity checklists from design assumptions and maps these forward to occupancy. Such a mapping would ideally constitute a dialogue between design and evaluation through time” (ibidem, p. 10-11). Last but not least, spatial ecology model focuses on “examining configurations of, and relationships between, the variety of spaces available” (ibidem, p. 6).

### **Space, learning spaces and educational leadership**

Spatial context of learning is relevant for educational leadership because it raises awareness of this usually neglected layer of learning processes. Theoretically speaking, spatial layer may play a relevant role in both planning and conducting leadership actions. If space is understood not only as a background or a scene on which

actions take place, then it may be actively used to reach leadership goals. According to Bush (2011) defining educational leadership one has to take into account three dimensions: influence, vision and values. Influence stands for influencing on others, it is intentional (Dorczak 2014, p. 8). Of course, space is a vital element of influence. By managing space once influence may be both boosted or decreased. If the spatial dimension is not reflected in leadership goals and actions, it may act as an obstacle. For instance, if people experience space as, for instance, harsh or unpleasant then an encouraging narrative of a leader is in a contradiction with it, and space will decrease influence of a leader. As for the vision “educational research also shows that having a clear vision and being able to achieve it is very high on the list of expectations towards school heads expressed by teachers, parents and others involved in school life (Dempster, Logan, 1998)” (Dorczak 2014, p. 9). A vision may be communicated by the use of space (for instance, by the use of posters, etc.) but also space as such may communicate something different than a vision delivers. The same is with values which also may be mirrored in space – space may be a medium of communicating values but is values presented by a leader lay in contradiction to the one communicated by space then individuals will see this very contradiction.

Below I provide exemplary questions that might be helpful for an educational leader who wants to take space seriously

in his/her work (answering to them may be based on observation which is easy and almost costless):

-/ where learning and leadership actions take place? What can you say about this place in terms of meanings it provide, experiences it evoke and materiality that shapes it?

-/ what meanings this particular space provides?

-/ how you as a leader feel in this particular space? What can you say about experiencing of this particular space by other individuals?

-/ whether physical conditions support or block activities important for leadership and learning?

Collecting answers for these questions do not need a study to be conducted. If time and money budgets allow for this more complex studies may be carried out, which base on evaluation models presented above.

## Conclusions

Within this article I was seeking to highlight the importance of space on educational and learning processes. This very reflection results from increased both practical engagements in learning spaces (design and funds) and theoretical insights into the topic (spatial turn). According to the spatial turn and theories on which it bases introduces concepts that treat space not as a passive background but as an active one. Semiotic approach aims at reading space – space is under-

stood as meaningful, hence, space and objects within it have meanings. In perception or phenomenological approach space is understood as something being perceived, experienced by individuals. In material approach space is treated as an active in social relations in terms of its material features, not meanings and experiences. Recognizing relevance of space in reference to learning means taking into consideration space's meanings in the process of learning, its experiencing by individuals who learn, and reflecting on social dimension of material setting in which learning processes take place. Yet, studying space in the context of learning is challenging and developed methods are still ahead. Brett Blight and Ian Pearshouse (2011) summed up methods of learning space's evaluation – it is a complex toolkit for scholars interested in space and learning issues, and also for educational leadership's researchers and leaders, since it highlight a spatial dimension of leadership as an social activity in terms of influence, vision and values. Space may be a helpful means of increasing educational influence, and communicating both vision and values connected with it. However, if one not reflects upon it, it may decrease influence and hinder communication by, for instance, providing an alternative or contradictory message. Yet, this issue here is only introduced – it is to be treated as an invitation for other scholars to elaborate upon it.

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