



Educação e Pesquisa

ISSN: 1517-9702

ISSN: 1678-4634

Faculdade de Educação da Universidade de São Paulo

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A apropriação do espaço escolar pelo projeto pedagógico: o caso da Escola da Ponte (Portugal)¹
Educação e Pesquisa, vol. 44, e183443, 2018
Faculdade de Educação da Universidade de São Paulo

DOI: 10.1590/S1678-4634201844183443

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Appropriation of the school space by the pedagogical project: *Escola da Ponte (Portugal)*¹

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Abstract

The present study values the pedagogical project as a frame of action for individuals in the school organization. Indeed, it is according to this perspective that interpretations of the school space by its users (teachers in particular) are analyzed in a very specific context – Escola da Ponte –. Within the scope of widespread failure of the open-plan school experience in Portugal, the aim of this study is to highlight how the successful experience of Escola da Ponte was born out of the innovative nature of the pedagogical project (questioning the “DNA” of the pedagogical organization of schools – the class). Our interpretation is based on the concept of space as a social construction. Above all, it sustains that it was the consistency of the pedagogical project and the interaction between actors and objects of action that determined how the space was organized rather than the induction process of an open-plan school building. The empirical collection served to ascertain how the space was appropriated by the pedagogical project. A survey was sent by e-mail to the teachers who taught at this school between the mid-1970s and 2012. The chronological gap is due to the lapse of time between the beginning of the pedagogical project and the transfer of facilities to a new building.

Keywords

Escola da Ponte (Portugal) – School space – Open-plan schools – Pedagogical innovation – Pedagogical project.

1- This study has received national funding from the FCT - Fundação para a Ciência e Tecnologia, IP, within the scope of the project PTDC/MHC-CED/0893/2014. English version by Tania Josephine.

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DOI: <http://dx.doi.org/10.1590/S1678-4634201844183443>

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Introduction

The transformation of this traditional pedagogy into a more liberal pedagogy changes the school architecture which has a tendency to become more flexible and permissive. (cited by DEROUET-BESSON, 1984, p. 23).⁴

It would be foolish to assume either that all teachers in open space conducted open classrooms or that open classrooms were located only in open space. (CUBAN, 1993, p. 188)

The present study is based on the assumption that the evolution of pedagogy (more precisely, of pedagogical and didactic practices) has a decisive influence on the configuration of the school space - indeed, this is the meaning of the words cited by Derouet-Besson. Fundamentally, this also means admitting that it is not the architecture of the school that fosters a specific type of pedagogy. Effectively, in a recent study taking the *Programa de Modernização das Escolas de Ensino Secundário* [Modernization of Secondary Schools Programme] as its framework, Duarte, Veloso and Marques (2014, p. 418) showed how the renovation of school spaces had no decisive impact on teaching practices, and “remain[ed] set in a traditional mould”.

If we go back to the 1970-80 decades, when the idea took shape that the building would determine the teaching method (BARROSO, 2002), we may observe a case that clearly highlights the difficulty in fostering a pedagogy based on (almost exclusively, as it would appear) the design of new educational environments. We are referring to the experience of open-plan schools in Portugal, which began in the 1970s. In fact, the overriding principle of the design of these schools, namely to encourage a shift from the traditional class organization, was rejected by many teachers, principals and even parents and guardians (MARTINHO; SILVA, 2008). Indeed, Catherine Burke and Ian Grosvenor (2008) refer to the fact that the research conducted in the USA in the 1970s on the design of school buildings (adding that half of the schools constructed in the late 1960s were open-plan) points to the following conclusion: “architectural design does not fundamentally determine teacher practice, but rather teachers determine and arrange their spaces in accordance with their perceived needs, habits and beliefs” (BURKE; GROSVENOR, 2008, p. 152). The aforementioned conclusion of these two authors is particularly interesting for our research which reports on the experience of open-plan schools in Portugal, namely Escola da Ponte. It should be noted that open-plan school spaces, originally a criticism of the pedagogical practices in force up to the 1950s, do away with the notion of classroom space; its novelty was essentially in the creation of two or three interconnected classrooms (without walls) with common support areas. Thus, it was possible to carry out a number of different tasks with different groups of pupils. Fundamentally, the design of these schools aimed to “appeal” to pedagogical practices whereby the child would be the centre of the teaching and learning process. As far as Derouet-Besson (1997) was concerned, the architecture of the school would be the material and spatial support of an open education project. However, this requirement called for, and was dependent upon

4- “La transformation de cette pédagogie traditionnelle en une pédagogie plus libérale modifie l’architecture scolaire qui tend à devenir plus souple et plus permissive” (authors’ translation).

the collaboration of teachers. In the same vein, provision was made for the possibility of departmentalization, namely for teachers to be able to work with the subjects in which they felt more competent or with which they were most at ease (SLAVIN, 1989). The idea that a single teacher would not be entrusted with a specific group of pupils was implicit. Furthermore, as a pedagogical principle, flexible management of the curriculum and school time was also established (GONÇALVES, 2011).

As already mentioned, in most situations, the experience of open-plan schools was generally negative (and not only in Portugal). This means that the “DNA” of schools’ pedagogical organization, the classroom, was not questioned (BARROSO, 1996). In the case of Portugal, the research conducted up to now, and it should be stressed that this theme has been of interest to historiography, enables us to pinpoint the main difficulties that hindered an “open pedagogy”, namely: i) the fact that teachers have different work methods and are not familiar with the “P3 pedagogy” (assuming, in the latter circumstance, little attention to specific training); ii) the lack of stability of teacher workforces; iii) the absence of a collaborative culture; iv) the prevalence of experience-based knowledge (GONÇALVES, 2011; MARTINHO, 2011; ALMEIDA, 2015).

Based on the research of Escolano Benito regarding school culture, Gonçalves (2011), sheds light upon the fact that the difficulty in implementing open-plan schools in Portugal stemmed from a lack of articulation among the three areas of school culture, namely: i) the regulations and architectural design of the buildings (prescribed by architects); ii) the pedagogical discourse framework; iii) the empirical culture of the teachers. However, in line with the position adopted by Ana Patrícia de Almeida (2015, p. 240), the “weight of experience-based knowledge” appears to have been determinant (as a resistance to the change factor). Moreover, this is the type of knowledge that stands out in the way the “P3” school buildings are interpreted by their users, thus leading to a redevelopment of these spaces (ALMEIDA, 2015).

Notwithstanding the overall unsuccessful experience of open-plan schools in Portugal, a consequence, as previously mentioned, of not having questioned the “central issue” of the classroom (hence the reference to the *externality* of the reform), there were exceptions. The most well-known, by far, is the experience accomplished at Escola da Ponte. Indeed, according to José Pacheco (1998), the mentor of this project, the structure of the school space was one of the decisive factors for the success of the pedagogical project.

Conceptually, it is useful to refer to the work of Jane McGregor (2003, 2004), insofar as the author proposes new (and stimulating) understandings for the spatial dimension in education. In effect, as the work context of teachers, the physical environment is envisioned as follows:

Space is seen as relational, both producing and a product of interconnecting social practices [...]. Consequently, space is not pre-given, static or completed; it is always in the process of becoming. (MCGREGOR, 2003, p. 354, author’s emphasis).

In this light, as far as the experience of Escola da Ponte is concerned, it is worth noting the following. Although, as previously indicated, the open-plan design of the

building appears to have been determinant for the implementation of the pedagogical project, the uniqueness of the latter and the interaction among all the actors involved were no less important in determining how the space was interpreted. For example, based on an external evaluation report (Directorate General for Education), Paula Guimarães and Raquel Oliveira (2006) refer to how Escola da Ponte is described as an open-plan area, not only due to the organization of the space, but also on the basis of the specificity of the pedagogical work, thus enabling the School to function differently to others.

Therefore, it is also the aim of this study to document the physical space of the School and to note patterns of use and interaction. More explicitly, by drawing on the *place topology* concept (MCGREGOR, 2003), we set out to describe the type of space the teachers like for working with their pupils, and to understand why these spaces are used in a particular manner, while assuming the following: jointly, the architecture, furniture, equipment and practice define appropriate and relevant behaviour (for a specific context in a given time frame). What is on the agenda, and we are still following the research of Jane McGregor (2004, p. 348) closely, involves considering “how networks of people and things order the spaces of workplace”; it is the concept of space as a social construct that emerges here.

It should be further stressed that this study values the idea that the pedagogical project was constituted as a framework for action for those within its organization, shaping their beliefs, habits and practices. Indeed, it was on the basis of this notion of “project” – a formal space for the translation, composition and re-composition of rules (BARROSO, 2001) – that, the *school mould* was broken with regard to Escola da Ponte (VINCENT; LAHIRE; THIN, 1994).

Method and aim of the study

The aim of this study is to ascertain the appropriation of space, in this particular case, an open-plan building (“P3”), by the pedagogical project implemented in Escola da Ponte. In line with the idea expressed in the Introduction, the definition entailed in the aim subordinates (but does not ignore) the impact the school space has on the work of the teachers. In truth, this study seeks to understand how the building is interpreted, while bearing in mind the various assumptions that shape the pedagogical project.

The empirical collection of data served as the basis for ascertaining how the space was appropriated by the pedagogical project – the expression, it should be noted, belongs to Derouet-Benson (1984). The option was taken to focus on one of the direct users of the School: the teachers. Thus, a questionnaire survey was sent (by email) to the teachers who had taught at Escola da Ponte between the mid 1970s and 2012. The justification for this chronological arc is the period of time that elapsed between the launch of this pedagogical project and the transfer of facilities to a new building.

In addition to the collection of information on the context characteristics of the teachers (such as, for example, qualifications, year of entry in the School, years of professional experience, period of employment at the School and duties performed), the survey sought to ascertain the following: i) space typology; ii) place and teaching

topologies. As far as the former is concerned, the intention was to map the spaces used by the teachers (within the context of their teaching practices), and the informants were asked to choose one or more answers from a pre-defined list or to indicate (an)other which had not been included in the questionnaire. On the other hand, with regard to the place and teaching topologies, bearing in mind that the works of Jane McGregor (2003, 2004) are the frame of reference, the aim, above all, was to analyse the spaces on the basis of the activities (or pedagogical practices) carried out therein, as well as the teacher-pupil interactions. The participants were asked: i) how the space was organized, taking the school furniture and pedagogical devices specifically into account; ii) whether the spaces were reorganized on a weekly basis (and if so, what was changed, on the basis of what and how did the pupils and their supervisors interact) iii) whether the teachers showed preference for any work space in particular; iv) whether there were any constraints arising from the use of an open-plan building; v) what features of the “school organization” were deemed determinant for the accomplishment of the pedagogical project; vi) to what extent did they agree with the following statement: “architectural design does not fundamentally determine teacher practice, but rather teachers determine and arrange their spaces in accordance with their perceived needs, habits and beliefs”.

Beyond the aims of this research study, reference to the methodological approach adopted in the survey by questionnaire sent to the teachers should also be made. The choice of this methodology, from a broad range of options available to research in social and human sciences, may be easily justified. Taking the characteristics of the target population into account, namely their physical dispersion and difficulty in organizing face to face interviews, the decision to use a survey by questionnaire was deemed preferable, making it quicker and easier to reach the respondents. The use of a digital format, accessible through an online platform (*Google Forms*) was considered appropriate, given that this way of collecting information makes the activity more dynamic, appealing and less long-winded than the common recourse to paper and pen. On the other hand, and as mentioned by Maciel et. al. (2014, p. 158), the online use of questionnaires enables a reduction of costs and allows for a higher number of respondents to receive the document at a far quicker rate. Nevertheless, it also presents risks that should not be underestimated: a number of theoreticians have pointed to the possibility of problems that may occur, such as, for example, a low respondent participation rate; lack of access to the equipment required to answer the survey and/or the researcher’s lack of control over the real respondents (LYNN, 2013, referred to by MACIEL et. al., 2014).

The length of the survey was also taken into consideration, as a number of texts recommended that this type of instrument should not be too long in order to avoid dropout or dispersion. Hence, the survey by questionnaire was made up of 17 questions, most calling for closed-ended responses and seven for open-ended responses, in order to reduce the likelihood of influencing the respondent and to ensure a more complete collection of information. To sum up, the survey was structured according to the following categorization: 1 – Biographical data of informants; 2 – Contextual data; 3 – Space topology and 4 – Place and teaching topologies.

Escola da Ponte: construction of a consistent and innovative pedagogical project

The most distinctive trait of the Escola da Ponte experience as of the mid 1970s, of which Professor José Pacheco was mentor, is based on a break with classroom organization (CANÁRIO, 2004). In other words, this means that the pedagogical project put the homogeneous classes of the graded school structure at stake. A deliberate process of change was implemented so as to find solutions for dealing with the heterogeneity of the school population. On the other hand, it is worth noting that this innovation was founded on the perspective of an institutional critique (CANÁRIO, 2004, p. 33), or rather on professional knowledge (that of the teachers) constructed in context, “combining collective action and reflection”; and not, therefore, on an institutional perspective - that of innovation under a guardianship (CANÁRIO, 2005).

The main motive behind the pedagogical project constructed at Escola da Ponte was, in fact, to promote teaching adapted to the differences and characteristics of the pupils. Furthermore, strong involvement on the part of the local community (namely parents and guardians), the assertion of a human rights policy (guaranteeing equal opportunities and participatory and democratic citizenship) and, not least importantly, an “active and responsible sense of institutional autonomy” (BARROSO, 2004, p. 11) were assumed.

According to José Pacheco and Maria de Fátima Pacheco (2015, p. 11), accomplishment of the stated principles involved “attributing particular value to how learning was carried out and to the contexts in which learning took place”. In pursuit of a non-unifying school (without classes/bands), this implied the creation of a pedagogical work dynamic in an open-plan school space. The pedagogical organization of the Escola da Ponte may be observed in the following citations:

The pupils are organized into groups that are formed on the basis of the educational needs, whenever there are new projects. They move around the spaces of the school according to the areas of knowledge they are exploring at particular times, working with different teachers, developing work which is conducive to reflection, critical thinking and a research component. It is in this context that evaluation is seen as a learning opportunity moment and it occurs when the pupil wishes, or rather, when he/she feels ready to explain the knowledge he/she has acquired. (PACHECO; PACHECO, 2015, p. 12).

Thus, particular emphasis is given to the horizontality of relationships, the autonomy of the learners, the teamwork of the teachers and their educational action, which are all geared towards offering support rather than masterly communication (hence the reference to “educational supervisors”). The possibility for pupils to work individually or in a group (peer- learning plays an important role), expressing a set of activities developed in various flexible learning spaces is also fostered. Moreover, and drawing on the words of António Nóvoa (2017, p. 14), “knowledge acquisition is accomplished from the perspective of appropriation and research, and is not limited to a sequence of classes and subjects”- fundamentally, learning through discovery.

Conversely, evaluation is a key element insofar as it affirms itself as the regulator of pupils' learning; this means that a personal appropriation trajectory of knowledge and experience is acknowledged in each pupil.

Curriculum management is, by far, another important issue in the Escola da Ponte experience. In fact, since the mid-1970s, the School has developed its pedagogical project within the scope of the local context. This means that, as far as curriculum management is concerned, the characteristics and knowledge of the school community are valued – the curriculum (flexible and resulting from teachers' autonomy) is configured to take pupils' life experiences into consideration, thus preventing underachievement (LEITE; FERNANDES, 2009).

We refer to the accomplishment of autonomy in the assumption, on the part of the pedagogical team, of flexible curriculum management – a decisive step towards the construction of a school for all (LEITE; FERNANDES, 2009). However, the issue of autonomy should also be considered in more detail, namely institutional autonomy, grounded on contextualized professional practice, on the existence of cooperative self-learning devices (study circles), on the feeling of belonging to a pedagogical team, with an underlying theory and anchored in the peer, constituted by collective action and reflection. In short, and in the words of Rui Canário (2004, p. 39), this autonomy is based on “the professionalism of a teaching team”. It is also possible to build on the previous references to the autonomy of the learners. It may be observed that the organization in nuclei (initiation; consolidation; further development) conveys the importance of the pupils' work and the idea that their autonomy, in terms of their ability to plan activities, collect and interpret information and adopt evaluation procedures, is progressive. In such cases, autonomy is supported by a series of pedagogical devices such as evaluation records, a fortnightly plan, an aims grid, projects records, the “tutorial”, a list of problems of the school and the town, as well as a map of responsibilities. Finally, a word on the implication of the pupils in the collective life of the School and their accountability. Here, the reference is not merely to the democratic participation of the pupils in the various dimensions of the school organization, but above all to the democratizing effects contained in this participation. Hence, the pupil assembly is paradigmatic. According to Paulo Morais (2017, p. 189), “the meetings [...] are a concrete example of living in a community”.

To close this section, it should be noted that the success of Escola da Ponte was the result of teamwork that was capable of further developing the *professionalism of teaching*, establishing bridges with the local community (based on the understanding that the School could only change if it changed its relationship with the community), of experiencing real (and not imposed) autonomy, and within the scope of deliberate change, of constructing an innovative and consistent pedagogical project, set on prevailing over a class-based organization.

Presentation and discussion of results

It is a well-known fact that most research precautions are related to the size and nature of the sample, its generalization, the analysis methods used, as well as the inferences

extracted from the data (ROSENHOLTZ, 1991). As far as the present study is concerned, we are aware of the limited number of informants. Therefore, we will not advance conclusions that go beyond the specificity of the empirical material and context of analysis.

Let us begin by analysing the biographical and contextual data of the informants.

Table 1- Biographical and contextual data of informants – Key (N=8).

	Frequency
Sex	
Male	4
Female	4
Age	
Between 20 and 30 years	0
Between 31 and 40 years	4
Between 41 and 50 years	1
Over 51 years	3
Qualifications (upon date of entry into the School)	
Baccalaureate	1
Degree	7
Years of professional experience (upon date of entry into the School)	
Up to 4 years	6
Between 5 and 7 years	1
Between 8 and 14 years	1
Between 15 and 22 years	0
Between 23 and 40 years	0
Number of teaching years at the School	
Up to 5 years	1
Between 6 and 10 years	5
Over 10 years	2
Duties performed	
Teachers	4
Teachers and Coordinators	3
Other	1

Source: Questionnaire data.

To begin, a balance between males and females and also the fact that there are no respondents under 31 years of age may be observed; the latter are distributed primarily across the 31 to 40 years and over 51 years age brackets.

As for the contextual data, the following may be observed at the date of entry into the School: i) only one of the informants did not hold a degree; ii) the vast majority had only a few years of professional experience (up to 4 years); in fact, no respondent surpassed 14 years of professional experience. There was only one informant who reported having worked at the School for under 6 years – most were situated in the bracket covering the period of 6 to 10 years. Finally, it should be noted that half of the respondents reported having simultaneously performed the duties of teacher and coordinator/another position.

What inferences can be made on the basis of the abovementioned data? As far as our research agenda is concerned, it is important to focus on the following: at the time of their entry into the School, most of the respondents were at the beginning of their career; most of them had come to work at the School for a period of over 5 years. Nonetheless, this data can only be interpreted in light of additional information. Let us consider the following table.

Table 2- Periods when informants taught at Escola da Ponte.

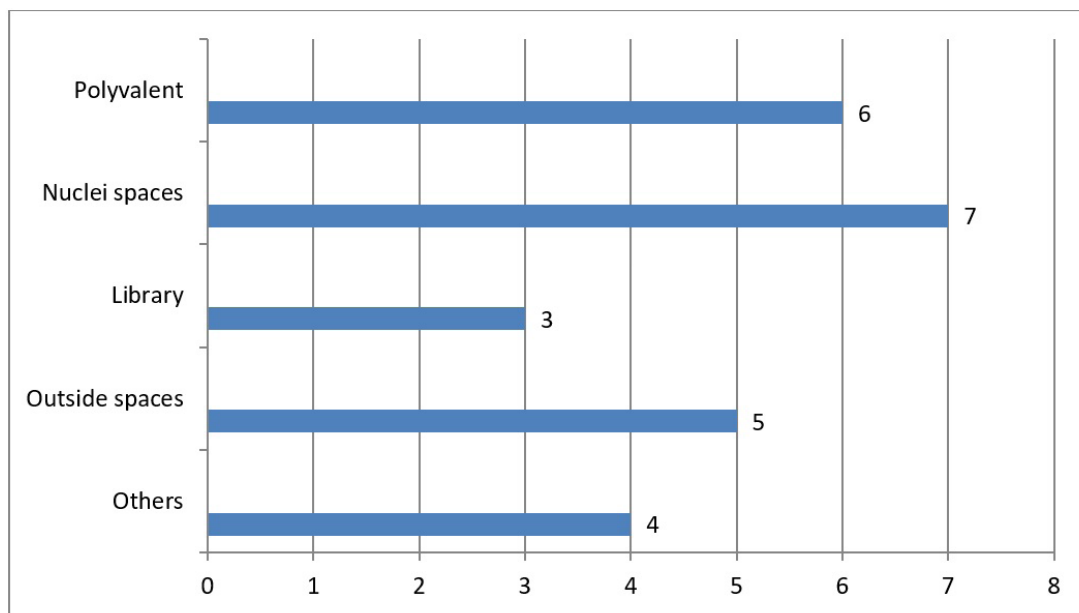
Periods of teaching at the School	Frequency
1976-1988	1
1989-2000	3
2001-2012	8

Source: Questionnaire data.

As may be perceived, all the informants taught at Escola da Ponte between 2001 and 2012, during a period when the pedagogical project was perfectly consolidated. It is also worth mentioning that in 2004, the year when the first autonomy contract was entered into, it became possible, by means of a regulated universal tender, to select the teaching staff (which had, in fact, been an informal practice since 1996). Furthermore, the mentor of the pedagogical experience was also part of the staff force until 2005. Therefore, the idea this study wishes to stress is that the commitment of the educational supervisors to the pedagogical project developed in the School was based on the following assumptions: i) selection of teaching staff on the basis of the aims of the aforementioned project; ii) lack of excessive experience-based knowledge (thus making integration in the pedagogical team and practice in an open-plan space much easier); iii) the possibility of them being able to teach at the School for a relatively long period of time. Naturally, all of this was a result of strong leadership.

Let us now move on to documenting the work spaces used by the informants in the context of their teaching.

Graph 1 - Work spaces used by informants.



Source: Questionnaire data.

Despite the survey being relative to the teachers who taught at Escola da Ponte between the mid-1970s and 2012, it is worth recalling that the open spaces only emerged in the School as of 1984, at the initiative of the pedagogical team. Therefore, Graph 1 refers to this time frame (as do all the tables and graphs hereafter).

The first finding is related to the fact that the informants report a particularly high usage of the nuclei spaces (for initiation, consolidation and further development) and the multipurpose hall. This does not come as a surprise. These are, in fact, crucial areas for the accomplishment of the pedagogical model: the nuclei, organized on the basis of pupils' degree of autonomy and level of knowledge acquisition, are privileged interaction areas for teachers, tutors and tutees as far as cooperation and teamwork are concerned; by the same token, the multipurpose hall also lends itself perfectly to a variety of options and activities: direct lessons, readings, demonstrations, rehearsals, the creation of posters, assembly meetings.

It may be noted that the spaces outside the building (but within its enclosure) have some expression. In order to fill in the space entitled "other", informants were required to define the space in question. In the answers, the use of community building rooms (such as the Cultural Centre of Vila das Aves, the Fire Station of the town, the Sezim Institute) was frequent, and their function was to support the school building; their use was also simultaneously a symptom of an intention to involve the community in school activities. In this space, one of the informants mentioned the laboratory (INFORMANT 5, 2017) and another felt the need to explain that he/she had not referred to the library "because there

was no 'normal' library area" (INFORMANT 2, 2017); this may help understand the low reading in Graph 1 for this item: Indeed, what this actually means is that this area was not regarded as autonomous, given its integration in the nuclei.

This last idea, that there were learning areas within the nuclei associated with specific tasks and activities, becomes more apparent when informants are directly questioned on the matter, and this leads us to the place and teaching topologies (MCGREGOR, 2003, 2004). Let us observe the following answers: "Initiation [nucleus]: artistic education area; Consolidation [nucleus]: laboratory" (INFORMANT 8, 2017); "an area reserved primarily for laboratory experiments, a space reserved for the arts" (INFORMANT 6, 2017). Indeed, there is a real pedagogical action programme expressed in the next answer: "we interacted as a team, in spaces adapted to the different curricular areas" (INFORMANT 7, 2017).

With the purpose of further understanding the pedagogical work dynamic in the nuclei, informants were asked about the layout of the space, taking the school furniture and pedagogical devices into consideration. Overall, the informants refer to circular tables for three to four pupils that are perfectly adapted to work groups. Simultaneously, a central idea emerges from these answers: that of the space being organized according to the practices required by the educational project. Let us look at the following excerpt:

The furniture consisted of several cupboards (with shelves), given that a broad range of research resources and stationery were in use, organized so as to allow pupils and supervisors as much mobility as possible due to the fact that these areas had lots of pupils and adults circulating freely. As far as possible, the walls were all padded with cork so that paper material (I need help; I can do it now; etc.) and pupils' homework could be easily pinned to the wall. (INFORMANT 3, 2017).

In addition to this rich pedagogical environment -namely in terms of the available resources, the various options at the disposal of the pupils, the presence of several educational supervisors (ensuring constant interaction with the pupils), and of equal importance, the self-regulation learning devices -, circulation optimization and flexibility of the area should be noted. As regards the latter, one informant pointed out the following: "one of the things that characterized these spaces [the nuclei], was the frequent change in layout, according to specific needs (INFORMANT 2, 2017).

In fact, small adaptations were made daily to the respective areas, on the basis of work requirements. However, every week, there were two activities, or two occasions which involved a more significant adaptation of the spaces. The informants, when questioned on this matter, frequently referred to this detail:

Throughout the week, there were two main occasions involving a different layout of the areas, namely tutorial meetings and responsibility meetings. In the case of the former, the areas were adapted so that the tutor and tutees could be organized in a small group, to foster interaction between the teacher-tutor and respective pupils, but also among tutor colleagues. In the responsibility meetings, the area was readapted to create a space that was more conducive to debates and exchange of ideas, according to the needs of the group. (INFORMANT 5, 2017).

A broader perspective, in other words, the possibility of making the areas flexible at any time (and not only) in order to meet the plan requirements of the “learning individuals”, is provided in another answer to the same question:

There was no rigid or impervious organization. It was always systemic and dynamic, because that is what was required by the work methodology. Therefore, the fortnightly plans of the school (educational community) and the fortnightly and weekly plans of each pupil determined the daily interactions. The absence of a supervisor in any area was deemed natural and instantly supplemented with recourse to immediate negotiation and coordination [...] It was also perfectly natural for a pupil to move to another area of work at any time of the day, whether to seek help or more specific orientation from a particular supervisor. (INFORMANT 3, 2017).

It should be noted here that through departmentalization (SLAVIN, 1989), the opportunity for help or more specific orientation in certain topics (with which the teachers felt more comfortable or better prepared), was made available to all pupils. This issue emerged when teachers were asked whether they preferred a specific work area. Only two informants were forthcoming with their preferences, one of whom established the following link:

I enjoyed working in the areas where Mathematics and Science were studied most of all, because that was my basic training, and I particularly enjoyed one year when I worked in closer connection with the group a second time. (INFORMANT 2, 2017).

Other empirical data further support the premise of our arguments with regard to the context under study, namely that it was, above all, the consistency of the pedagogical project (in fact, the broad “umbrella” of educational action) and the interaction between actors and objects that determined the organization of space; it went far beyond the induction process of an open-plan building.

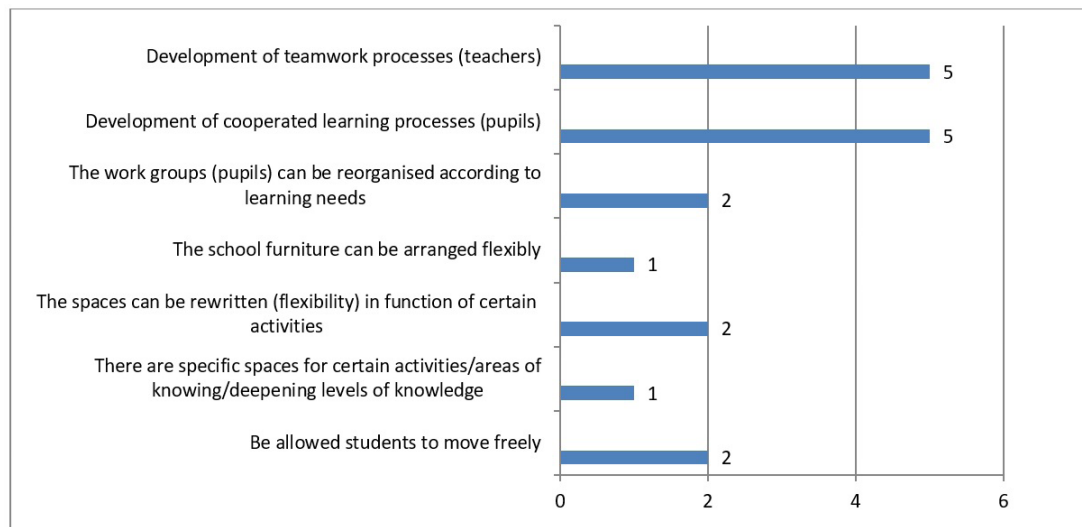
Nevertheless, it was interesting to observe that not a single informant referred to constraints related to the use of an open-plan space. An informant’s assumption that the absence of restrictions or problems was the result of “community work” (INFORMANT 3, 2017) was even more fascinating. However, the same informant also displayed an understanding that the school space (open-plan area) influences the way teamwork is put into action, stating that “the constant support and collaboration that is attainable among peers in this type of architecture is the biggest advantage.” (INFORMANT 3, 2017).

We will close the analysis and discussion of results with Graph 2 and Table 3, which provide significant support to the arguments advanced at the beginning of the penultimate paragraph.

Informants were asked to choose three of the seven (pre-coded) possibilities set out in Graph 2 they considered to be key features for fulfilment of the pedagogical project. It should be noted that the teamwork (teachers) and cooperative learning development (pupils) processes are, in the eyes of the informants, absolutely crucial features of educational action. In fact, they even go beyond some of the “foundations” of open-plan

school organization in, for example, the flexibility of space and layout of school furniture. However, this vision appears to contradict the statement put forward in the last quotation of Informant 3.

Graph 2- Features deemed most determinant by informants for fulfilment of the pedagogical project.



Source: Questionnaire data.

Note: The answers of six informants were validated.

Let us now observe Table 3.

Table 3- “Essentially, it is not the architectural design that determines teachers’ practices since they, themselves, organize the space on the basis of their habits, beliefs and needs.” To what extent do you agree or disagree with this statement?

	Frequency
I totally disagree	0
I disagree	1
I neither agree nor disagree	1
I agree in part	4
I totally agree	2

Source: Questionnaire data.

As may be observed, most informants agree (totally or in part) with the above-mentioned statement. In a contextualized interpretation, most of the informants’ identification with the statement conveys the following ideas: the organization of space stems, essentially, from the pedagogical project, the empirical culture, the teachers’ practices and pupils’ planning. It is also on this basis that: i) the school furniture is configured in a specific way (adapted, for example, to group work, active participation,

the discussion of ideas); ii) the bulletin boards (supporting and self-regulating the learning experience) are displayed in a particular way; iii) specific work spaces are created (based on the various curricular areas); the notion of space in the classroom is brought to an end (organization in nuclei); v) a set of interactions are defined between supervisors and supervisors, supervisors and pupils, and among the pupils themselves.

Final considerations

Having completed the empirical study – given the limited number of informants, it is not the aim of this study to raise questions on issues that go beyond the current empirical data and context of analysis – it is now time to systematize our conclusions. The first, which emerged at various points of the narrative, is that the successful experience of Escola da Ponte is founded on the consistency and innovative nature of the pedagogical project. Going a little further in our analysis, in the same vein as a number of other authors, such as João Barroso (2004), the pedagogical project is what defines the “real autonomy” of the School. What should also be borne in mind is the fact that the underlying idea of this project, designed and put in practice in the mid-1970s, is that an open-plan school should allow for educational action– which, in fact, was the case as of 1984. In other words, the aforementioned pedagogical intention pre-exists the open-plan building.

This last idea leads us to a second set of conclusions. In broad terms, the idea that the open-plan physical space, per se, does not pre-define or induce an “open pedagogy”, and cannot be regarded as something static. In fact, the school space is a social construction that is dependent on interactions among educational subjects, objects and the building itself. Our aim was precisely to highlight this dynamic process in the following sense: that the pedagogical project defines the scope of action in which individuals (namely the teachers) will act, while also determining how the work spaces are organized. This does not mean the “value” of the layout of the open-plan space is ignored (just as those promoting the experience in question do not ignore it) for fulfilment of the pedagogical project. This is an issue that needs to be hierarchized. With regard to the work group (teachers) topic, one informant referred to the architecture having brought advantages. However, it should be noted that none of this would have been possible without, for example, a collaboration culture among the teachers (simultaneously assuming a specific *vision* and *action*, common to all the team members). On a final note, let us consider the idea of Miguel Martinho (2011, p. 217), in his statement (with reference to Escola da Ponte) that “above all, the teachers maintained and gave ‘life’ to the open-plan spaces”.

References

- ALMEIDA, Ana Patrícia Tavares de. **Atores, regulação e conhecimento nas políticas públicas de construções escolares em Portugal**: as escolas de área aberta. 2015. Tese (Doutorado em Educação) – Instituto de Educação da Universidade de Lisboa (IEUL). Lisboa, 2015.
- BARROSO, João. Escola da Ponte: defender, debater e promover a escola pública. In: CANÁRIO, Rui et al. (Org.). **Escola da Ponte**: defender a escola pública. Porto: Profedições, 2004. p. 11-30.
- BARROSO, João. Gênese e evolução da organização pedagógica e da administração dos liceus: uma investigação no cruzamento de várias disciplinas. **Análise Psicológica**, Lisboa, v. 14, n. 4, p. 487-506, 1996.
- BARROSO, João. Innovation and change in school: challenges to teachers and architects. **Education Buildings and Equipment**, Atenas, n. 28, p. 21-26, 2002.
- BARROSO, João. O Século da escola: do mito da reforma à reforma de um mito. In: AMBRÓSIO, Teresa; TERREN, Eduardo; HAMELINE, Daniel (Ed.). **O Século da escola**: entre a utopia e a burocracia. Porto: ASA, 2001. p. 63-94.
- BURKE, Catherine; GROSVENOR, Ian. **School**. London: Reaktion Books, 2008.
- CANÁRIO, Rui. **O que é a Escola?** Um “olhar” sociológico. Porto: Porto Editora, 2005.
- CANÁRIO, Rui. Uma inovação apesar das reformas. In: CANÁRIO, Rui et al. (Org.). **Escola da Ponte**: defender a escola pública. Porto: Profedições, 2004. p. 31-41.
- CUBAN, Larry. **How teachers taught**: constancy and change in American classrooms. 1890-1990. 2. ed. New York: Teachers College Press, 1993.
- DEROUET-BESSON, Marie-Claude. **L'école et son espace**. tome 1. Paris: INRP, 1984.
- DEROUET-BESSON, Marie-Claude. L'évolution de l'expertise en matière de constructions scolaires en France au XXe siècle. **Revue de L'Institut de Sociologie**, Bruxelas, n. 1-4, p. 95-112, 1997.
- DUARTE, Alexandra; VELOSO, Luísa; MARQUES, Joana. Changing education through learning spaces: impacts of the Portuguese schools buildings' renovation programme. **Cambridge Journal of Education**, Cambridge, v. 44, n. 3, p. 401-423, 2014.
- GONÇALVES, Rita de Cássia Pacheco. **Arquitetura flexível e pedagogia ativa**: um (des)encontro nas escolas de espaços abertos. 2011. Tese (Doutorado em Ciências da Educação) – Instituto de Educação da Universidade de Lisboa (IEUL), Lisboa, 2011.
- GUIMARÃES, Paula; OLIVEIRA, Raquel. Escola da Ponte: the innovative pedagogic approach of an open school. In: U. B./CREA; U. Minho/UEA (Ed.). **Responses to challenges of youth training in the knowledge society**: case studies of promising practice. Barcelona: Universidade de Barcelona, 2006. p. 29-37.

INFORMANTE 1. **Inquérito**. 23 maio 2017. (Material da pesquisa).

INFORMANTE 2. **Inquérito**. 30 maio 2017. (Material da pesquisa).

INFORMANTE 3. **Inquérito**. 30 maio 2017. (Material da pesquisa).

INFORMANTE 4. **Inquérito**. 31 maio 2017. (Material da pesquisa).

INFORMANTE 5. **Inquérito**. 31 maio 2017. (Material da pesquisa).

INFORMANTE 6. **Inquérito**. 1 jun. 2017. (Material da pesquisa).

INFORMANTE 7. **Inquérito**. 3 jun. 2017. (Material da pesquisa).

INFORMANTE 8. **Inquérito**. 9 jun. 2017. (Material da pesquisa).

LEITE, Carlinda; FERNANDES, Sônia Regina de Souza. Políticas educativas e curriculares portuguesas e o projeto pedagógico da Escola da Ponte: reflexões e apontamentos. **Estudos**, Campo Grande, n. 27, p. 83-96, 2009.

MACIEL, Olga; NUNES, Adelia; CLAUDINO, Sérgio. Recurso ao inquérito por questionário na avaliação do papel das tecnologias de informação geográfica no ensino de geografia. **Revista de Geografia e Ordenamento do Território**, Porto, n. 6, 153-177, 2014.

MARTINHO, Miguel Henriques. «**P3**» - **Uma outra concepção de escola**: estudo de caso. 2011. Tese (Doutorado em Ciências da Educação) – Departamento de Educação da Universidade de Aveiro, Aveiro, 2011.

MARTINHO, Miguel Henriques; SILVA, José Freire da. Open plan schools in Portugal: failure or innovation? **PEB Exchange**, Paris, n. 12, p. 1-9, 2008.

MCGREGOR, Jane. Making spaces: teacher workplace topologies. **Pedagogy, Culture & Society**, v. 11, n. 3, p. 353-377, 2003.

MCGREGOR, Jane. Spatiality and the place of the material in schools. **Pedagogy, Culture & Society**, v. 12, n. 3, p. 347-372, 2004.

MORAIS, Paulo M. **Voltemos à escola**: como a Escola da Ponte ensina de forma diferente há 40 anos. Lisboa: Contraponto, 2017.

NÓVOA, António. Prefácio. In: MORAIS, Paulo M. **Voltemos à escola**: como a Escola da Ponte ensina de forma diferente há 40 anos. Lisboa: Contraponto, 2017. p. 13-17.

PACHECO, José. Fazer a Ponte. In: MOREIRA, M. et al. **Experiências inovadoras no ensino**: inovação pedagógica. Lisboa: IIE, 1998. p. 159-179.

PACHECO, José; PACHECO, Maria de Fátima. **Escola da Ponte**: uma escola pública em debate. S. Paulo: Cortez, 2015.

ROSENHOLTZ, Susan J. **Teachers' workplace**: the social organization of schools. New York: Teachers College Press, 1991.

SLAVIN, Robert (Ed.). **School and classroom organization**. Hove: London: Lawrence Erlbaum, 1989.

VINCENT, Guy; LAHIRE, Bernard; THIN, Daniel. Sur l'histoire et la théorie de la forme scolaire. In: VINCENT, Guy (Dir.). **L'Éducation prisonnière de la forme scolaire?** Scolarisation et socialisation dans les sociétés industrielles. Lyon: Presses Universitaires de Lyon, 1994. p. 11-48.

Received on August 1st 2017

Modified on September 27th 2017

Approved on October 25th 2017

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