Conceptualizing Hybrid Educational Spaces (HES)

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Abstract. The paper briefly explores the sources of hybridity in technology, politics, and civil society. Hybrid Educational Spaces (HES) is presented as a special sub-category of Hybrid Learning Spaces that treats learning in institutional form. In analyzing the main theoretical and practical differences between education and learning important dimensions are uncovered and discussed leading to a conceptualization of HES. A conceptual model is presented. The model may serve to inform the design of HES. It is concluded that in creating HES institutional obstacles may serve as creative constraints or even possible resources in fostering hybrid educational spaces.

Keywords: Hybrid Educational Spaces, Hybrid Education, Hybridity.

1 Hybrid Educational Spaces

Learning spaces are hybrid in the sense that they often consist of different mixes of being online and onsite at the same time enabled by the use of different technologies. They become hybrid in a cultural sense due to the diversity of people, viewpoints and issues inherent in any open space. This hybridity is closely related to intertwined historical developments within technology, politics and civil society. A special case of hybrid learning spaces termed Hybrid Educational Spaces (hereafter, HES) denote spaces that are both constrained by and possibly emergent within a specific institutional setting. They are the spatial-temporal structures that enable the field of Hybrid Education [1] and underlie the educational patterns supporting hybrid pedagogy [2] and new concepts of citizenship [3].

2 Sources of hybridity

Technological developments such as the emergence of the Internet and the invention of the standardized intermodal container for transport of goods have contributed to a drastic lowering of communications and transportation costs fueling the global integration process [4].

In world politics the promotion of free trade (e.g. within the legal framework of General Agreement on Tariffs and Trade (GATT)) and processes of political integration (e.g. within the European Union) has made possible the circling of goods, services and to some extent labor to every corner of the globe.

Constructed around these emerging networks of technology and politics societal debate has shifted or diverted the focus of attention away from the national domain to the global level prompting the emergence of a global civil society tackling issues such as climate change and economic inequality [5]. However, it is important to stress that in politics as well as technological development this is not at one-way street. There might be reversals of a given political trend and technology developments are often ambiguous involving both positive and a negative consequence [6].

The ambiguity is also present in developments within global education policy which stress intercultural tolerance and equality (e.g. UN's Sustainable Development Goals) and internationalization of higher education, while at the same time pushes for conformity to the OECD educational reform package and standardized test-based models. Educational technologies such as LMS are both broadening the scope of potential participation and raising the stakes for participation by commercialization of education and ed-tech [7].

In this interconnected world students increasingly build on an intercultural and hybrid base of experience that shapes their expectations and the construction of personhood [8]. Hybridity emerges as a reality in the classrooms of the world and as cultural theorist Bhabha emphasizes this; "[...] provide the terrain for elaborating strategies of selfhood – singular or communal – that initiate new signs of identity, and innovative sites of collaboration, and contestation, in the act of defining the idea of society itself." [9] When we rethink the concept of education under these conditions it becomes clear that the educational spaces of today are already perforated by the surrounding society and the world at large. The ubiquitous combination of the digital and the physical in an increasingly interconnected and globalized world have become the social norm, albeit unequally distributed, in many societies [10]. In other words, traditional educational spaces are being transformed along multiple dimensions giving rise to HES.

3 Dimensions of hybrid educational spaces

HES are in many ways are similar to Hybrid Learning Spaces—understood as a social practice around ill-defined, authentic tasks whose resolution requires transboundary learning—but can be distinguished from the former in at least two ways which refer to both theoretical and practical differences between 'education' and 'learning'. The differences highlight dimensions central to the understanding of HES both in their design and possible application. The dimensions are discussed in the following and are presented in a conceptual model of HES that may serve as a tool of reflection and give possible guidelines for the design of HES.

3.1 Theoretical differences

Two theoretical differences can be identified. Firstly, education as opposed to learning is fixed in time. It has a beginning and a predictable end. Learning on the other hand is essentially entangled with the lifespan of human beings. Education as such is an intersection in the process of learning [11]. Secondly, education is intentional in that it strives for some form of goal-attainment, level of competence or degree of knowledge

broadly conceived whereas learning is essentially something that happens or emerges and it is situated and context-dependent [12]. As an intentional activity education can also be understood as serving a specific function. Biesta for instance distinguishes between three functions of education concerning qualification, socialization and subjectification [13]. Education and learning are principally different even though education should imply learning you can have education without learning and learning without education. Not distinguishing between the two leads us to confuse a theory of pedagogy (teaching) with a theory of knowing (epistemology) [14]. HES can thus be said to be situated in a predictable time frame and implying intentions and serving specific functions.

3.2 Practical differences

Practical differences between learning and education refers to the empirical fact that education is institutionalized and at least at the basic level mandatory in most countries. From a legal perspective education is both an important social right and at the same time an obligation because it is essential to the full membership of a community and to citizenship. As Marshall points out: "[Education] should be regarded, not as the right of the child to go to school, but as the right of the adult citizen to have been educated." [15]. The institutional character of education distinguishes it from learning along certain dimensions or continuums which will be discussed in the following.

Formal/Informal.

Being institutionalized mean that any educational space has a certain degree of formalization, e.g. it relies on certain administrative procedures of admission, graduation or certification. Education are first and foremost bound to budget constraints and legal obligations. Education is also formalized along a chosen curriculum-mix of subjects making up the specific education [16]. In this sense education is also framed by specific historically emergent disciplinary norms either explicitly or implicitly stated in profession standards and moral codes broadly constituting what Kuhn termed the 'disciplinary matrix' [17]. Education cannot forego any of the formal requirements so creating HES comes with some restraints in order to foster a combination of the formal and informal social structures characterizing HES [18]. Designs must consider how to balance the formal requirements of learning goals with for example the more time-consuming informal learning activities. An example could be the use of student microblogs with the possibility of commenting and discussion from outside the school context.

Constructed/Realistic

Educational institutions are often bound to specific geographically fixed places e.g. the classroom, the laboratories, the school or the campus. These are the traditional learning environments in an educational setting. In these settings the real or realistic are bound to be mimicked in a constructed format to be able to fit into the pre-existing educational structures e.g. the textbook with real life examples, constructed models, multimodal representations, prototyping or role-playing etc. HES with its emphasis on social learning prefers realistic settings and real-world problems [19]. 'Realistic' has a broader

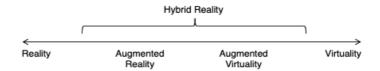
connotation within HES that makes it compatible with constructed educational elements. Drawing on insights from Mathematics Education it means that the students are offered problem situations which they can actually imagine at their level of experience [20]. Positioning along this dimension must therefore consider the zone of proximal development of the involved students.

Private/Public

Arendt developed a tripartition between the private realm of the family, the public realm of the world and the social realm of the school. Education was understood as a politically determined temporary interposition that would make the transition from the private to the public and from childhood to adulthood possible [21]. In education the children would have to be shielded from the public realm and vice-versa in order to make possible the renewal of our common world. In opening up to the public or in combining the private, the social and the public sphere one needs to be aware of maintaining a careful balance for the sake of the protection of the students. To strike this balance one might think of the notion of 'protopublic spaces' introduced by Eberly to describe how she turned her classrooms into spaces where students eventually engage with the public sphere for example by calling a local talk radio show to make and support an argument. To expose oneself to the light of the realm preparation is needed which is why the part that becomes visible to the public sphere is only the tip of the iceberg of a larger body of 'protopublic' classroom activities [22]. Other considerations along this dimension could be how to make flexible attendance possible in order to support a more equitable and inclusive learning environment e.g. people with disabilities or adult learners who work or have sick kids.

Reality/Virtuality

HES may denote situations where you are connected to public networks and where the distinction between the virtual and the real begins to blur and coalesce in what Milgram & Kishino termed the 'reality-virtuality-continuum' [23]. Although originally intended to enable to distinguish among different mixed reality displays within the field of augmented reality, the reality-virtuality-continuum may also serve to define one dimension of HES (see Fig. 1).



 $\textbf{Fig. 1.} \ \, \textbf{The reality-virtuality-continuum with hybrid reality.} \ \, \textbf{Adopted from [23]}.$

'Mixed reality' and 'hybrid reality' are used interchangeably to define the different combinations of the real and the virtual. Hybrid learning is characterized by the use of technology to enable, extend and enhance the learning experience broadly conceived, thus HES is positioned in the part of hybrid reality along the dimension from reality to virtuality [24]. The uses of IT and the affordances of the Internet are very central to HES because they to a large extent makes mobility along the other dimensions possible

e.g. to establish more informal learning spaces, to offer imaginative support in problem solving or to merge the public and the private sphere.

4 Concluding remarks

A possible way to conceptualize different HES is through their positioning along the dimensions mentioned above. HES is thus understood as a specific sub-category of more general Hybrid Learning Spaces that are suspended in different constellations of the dimensions illustrated in the conceptual model below (see Fig. 2). The model is intended as a means for reflection and discussion of concrete designs. It may inform design only to the extent that any design of HES must consider these dimensions.

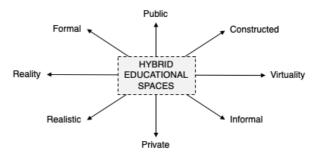


Fig. 2. Conceptual model of Hybrid Educational Spaces

Dependent on the institutional flexibility of a specific educational institution the design and application of any HES will have to consider the pre-existing structures and traditional entrenchments e.g. against the use of IT or the insistence on formal procedures and communication. In other words, where to position specific HES along the dimensions mentioned will be determined in each instance in a concrete educational context. To be sure HES is an institutional bounded phenomenon that is set in a fixed segment of time and space, but these constraints don't need to be stifling, they might as well become enabling if they manage to strike a delicate balance between the extreme ends in the conceptual model. This is of course easier said than done.

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