Experiences of mobile learning in rural contexts

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ABSTRACT

The possibilities of mobile learning began to draw attention in the educational field, especially in the countries of emerging economies, for two fundamental reasons, on one hand, the penetration of mobile telephony in the population and on the second hand, the importance that has taken the mobile phone in everyday life. This has allowed new ways of approaching formal knowledge, through new emerging technologies; as the mobiles are. It is worth highlighting the fact, that some countries such as (France and Chile) have opted for non-usage policies and even prohibition of mobile phones inside the educative environments, while in other countries like (United States, Colombia, Argentina) there is a growing concern for the implementation of mobile learning in different educational areas. This suggests that certain circumstances must be faced while the implementation of this type of technology, on the one hand, the issues related to classroom distraction and on the other, student’s motivation and interest in academic subjects and matters. The rural context away from the traditional dynamics of incorporation and technological integration, welcomes a new possibility in the usage of mobile technology in education. However, the research of experiences related to these possibilities, in fact, create more questions than answers; due to the lack of structural, systematic and systemic foundations of mobile learning spotted and glimpsed in the literature reviewed.

Author Keywords

Education, rural learning, mobile, smartphones.

INTRODUCTION

According to the international resources and already read literature, rurality means and holds significances for those territories that are located at a minimum distance of 8 kilometers or more, from a main city (Leibowitz, 2017), that is what makes and resembles a rural area. Leibowitz (2017) proposes another possible definition of rurality:

The concept of rurality is at once a demographic, geographic and cultural one (Roberts and Green, 2013). It is defined ‘empirically’ as having sparsely populated areas and ontologically as ‘a category and a set of experiences’ (Moreland, Chamberlain and Artaraz, 2003: 56). It is also spatial, geographical and contextual.

Most of the territories in the world continue to consolidate and remain as rural areas, therefore, significantly most education in the world is taught in rural areas (Leibowitz, 2017). In first world countries there are also concerns especially in the United States, Australia and the United Kingdom about the different reports that lead blindspots around rural areas due to the different conditions to which they belong and the neglect of the different authorities in charge.

Rural education also raises questions about how to make an educational model efficient in a globalized world, because educational models are conceived as effective frames to reduce educational
gaps; in this case expecting a similar performance as in urban areas, but usually educational model ignore realities and needs that are tied to contexts.

In the scenario of a more rural than urban world education, mobile learning is proposed as a possibility to perceive and fulfil different types of gaps, from two premises, the high penetration of cell phones and familiarity with the use of mobile devices. The experience accumulated by most countries in the world reveals that, the stage in which ICT integration projects were thought as a process of equipping schools and students was already surpassed, and that itself entailed significant and automatic change in educational practices.

**MOBILE LEARNING IN RURAL CONTEXT**

The documentary research on mobile learning in the international field evidenced 46 investigations in the following academic search engines: Elsevier, Google Scholar, JSTOR, Redalyc, Scielo, Springer Taylor and Francis, Universidad Pontificia Bolivariana Repository and Web of Science. The keywords used to find the information in the different databases initially were: learning, rural learning mobile, smartphone usage, use of the smartphone, experiences, ICT integration and education. Figure 1 presents the investigations found by country.

![Figure 1. Investigations by country.](image)

The information was analyzed and divided into five trends: 1) Training and training in other times, 2) Integration and gradual adoption, 3) Incorporation and projection, 4) Gradual creation and training and 5) Tools of transformation.
About the training trend, it can be concluded that mobile learning is seen as a training tool in the immediacy and as a possible platform for pedagogical thinking and practices. Integration and adoption, understood as the first step for the usage of mobile learning in the field of schools, projects or research that sensitize teachers to use it. The incorporation and projection as a second moment, is seen as where mobile learning is thought to be part of the curriculum and relevant part within the practices. Creation and training suggest a stage of appropriation and new usages of mobile learning with innovating teachers who have different ways of using technology. Finally, the trend called tools of transformation, perhaps the most optimistic, finds in mobile learning a possibility of change and resignification of rural learning.

The researches of mobile learning and rurality around the globe has been a topic of public matter lately, because of its capabilities to go beyond borders, boundaries and thresholds in terms of the consumption and scaffolding of the different set of skills that nowadays the modern era is demanding. The different interactions with the digital environment and the different dynamics in ongoing growth thanks to the vast amount of social mechanisms; that are right now progressing for the most part through the filters of society, involves simple activities or tasks like selling, trading, chatting, advertising, ways of education and so forth making it a possible path to educators and students to organically acquire a different possibility.

Different studies (Schaal, Matt and Gröbmeyer, 2012a; Schaal, Matt, and Gröbmeyer, 2102b; Bidin and Ziden, 2013; Jha and Burg 2013; Pimmer, Linxen, Gröhbiel, 2013; Keengwe, Schnellert and Jonas, 2014; Pimmer, et al, 2014; Gikas and Grant, 2015) suggest, the significant potential that mobile learning could have in educational contexts limited by physical resources or by infrastructure, since there is currently an exponential tendency to combine the personal processes of mobility with educational practices.

When it comes to mobile learning in modern societies, we can expect to run into the various amount of experiences that has been successful in terms of its conditions, characters, possible applications and results, however, there is a backdoor installed and settled that does not gets the attention that it deserves, with that being said, it is the meandering and always concerning or in other words, the aging of technological proposals when it comes to entrepreneurship arrangements, because whether we like
it or not; technology and its plentiful intakes about modern era are always going to become at some point outdated.

As well, there are countries with several policies and restrictions that does not allow mobile learning to have its space to evolve and be a possibility to increase and break the educative curve and plateau reached; due to the different malfunctioning scenarios and not well enough public investments to promote, enhance, improve and strengthen the different possibilities. In our case, specifically in Antioquia, it has a significant amount of populations that are not being covered with quality education and training, due to the legislations that only perceive urban and metropolitan conditions, instead of the diversity of the territories in terms of rurality and the conditions of education outside the big cities; that in fact creates a big dead spot.

Also, videogames have not been a possibility to be conceived as a mobile learning platform to increase and promote learning in different fields of education, even knowing that today; medium range phones count with the characteristics to run and execute different games with their visual engines. That could be an excuse to create different learning to trigger the so-called characteristics of meaningful learning understood as creativity, knowledge exchange, innovation, usefulness, real life utility and significant interaction.

In that fashion, the creation of different mobile labs to seed and harvest brand-new, in this case, pedagogical proposals in different territories has not been a relevant idea or concern to nowadays advocates of education; due to the not surpassed conception of the term web 2.0 around governmental and political spheres. Even thought, in the current time, new perspectives and sights are out there; trying to show in soft and polite terms that there are new constructions, usages, possibilities, approaches and rationales about the execution of mobile learning chances.

There is a significant gap in terms of the urban policies that must be faced likewise in rural venues or areas, explaining that the current policies mismatch the realities that most of those territories face. In that order, the leverage to the misconception of educative procedures and the lack of resources tamper the different meanings of rurality around the globe and, even in our own context, creating hurdles that are not easy to overcome promoting different imaginaries and nuances that people are nowadays hesitating about it. The current technological world has created concepts such as: ubiquity, portability, immediacy, connectivity and adaptability (Valero, Redondo, and Palacín, 2012), those concepts are key to promote mobile learning, because it has been spotted that, through the course and intensive mobile training programs, those concepts have a significant impact on teaching endeavors and pedagogical resources of teachers and students.

Finally, there is a misunderstanding about the concept of literacy and digital literacy, due to the lack of matching policies in rural areas that could allow the investment of knowledge and education needed to strive and have better glance about the situation. Similarly, most of the applied and ongoing proposals about mobile learning around the world are in certain way one-time endeavors that are already over with results, outcomes and are often no longer working. Then we must assess and wonder about what is going on to figure out how to make those proposals a long-term entrepreneurship overseas; and in our own contexts; create a meaningful canvas outside of the different sandboxes settled.

CONCLUSIONS

The different experiences of mobile learning that were analyzed, show a wide variety of situated populations, in terms of the ones that were compiled in this exercise, this just highlight one of the
benefits that technology brings, considering that its high penetration in the market, usability, coverage and accessibility enhance the contribution done by educative and formative experiences to overcoming social, economic, cultural hurdles, among others. Precisely in those countries that show reduced indexes of development, according to the last being said, that is how it is achieved to witness that the most part of initiatives in African, south east Asia, middle east and Latin-American are enrolled to tackled or impact the most vulnerable communities that in fact inhabits the rural area or the countryside.

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