

Towards a new model for inclusive education based on virtual social inclusion and mobile openness

Timothy Read*, Department of Computer Languages & Systems, School of Computer Engineering, Universidad Nacional de Educacion a Distancia (UNED), Calle de Juan del Rosal, 16, 28040 Madrid, Spain

Suggested Citation:

Read, T. (2020). Towards a new model for inclusive education based on virtual social inclusion and mobile openness. *World Journal on Educational Technology: Current Issues*. 12(1), 014–022. <https://doi.org/10.18844/wjet.v12i1.4507>

Received August 15, 2019; revised from October 20, 2019; accepted from January 1, 2020.

Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey.

©2020 United World Center of Research Innovation and Publication. All rights reserved.

Abstract

The political and social instability in many parts of the world has led to large numbers of refugees forced to find a haven in Europe. Both social and political pressure is felt in these host countries as they see the resulting situation worsening dramatically. In this article, an analysis of the geo-sociological assumptions within the conventional conception of social inclusion is undertaken. As a result, an alternative is presented based upon the knowledge-based, network-oriented nature of modern European society. This is referred to as Virtual Social Inclusion and it aims primarily at two fundamental dimensions of human activity: education and employment. The article focuses on the nature and implications of VSI for inclusive education and its underlying principles, particularly mobility and openness. It also details the educational framework needed, and what VSI requires to turn from a theoretical framework into a practical reality and the foreseeable implications of its implementation are explored.

Keywords: Virtual Social Inclusion; Inclusive Education; MOOC; Knowledge Society

* ADDRESS FOR CORRESPONDENCE: **Timothy Read**, Department of Computer Languages & Systems, School of Computer Engineering, Universidad Nacional de Educacion a Distancia (UNED), Calle de Juan del Rosal, 16, 28040 Madrid, Spain. E-mail address: tread@lsi.uned.es

1. Introduction

The refugee problem that came to a peak in 2015 is not going away any time soon. Recent data from UNHCR (2017) show that there are around 68.5 million forcibly displaced people, of whom 25.4 million are refugees. The number of displaced people is increasing by 44,400 every day. The principal objective of most, if not all of these people, is to reach and find haven and a better future in an economically and politically stable country. However, the flow of refugees into Europe is ever-more complicated as time passes. The problem is that not all European countries are in a good position to integrate such larger numbers of people into their socioeconomic reality. Their economies are in a plateau and any possible influx to share the already limited resources, and even put in jeopardy the existing status-quo, is politically unpopular and risks a backlash from a significant part of their population. Therefore, borders are closed, countries reject new refugees regardless of high-level EU agreements about admission quotas, fear of terrorism increases, and many cases of xenophobia have arisen, etc.

For these reasons, while the number of people forced to leave their countries increases with time, the majority of these refugees are unable to progress on their journeys to their destination of choice, and are stuck in holding camps somewhere along their route to Europe (De la Chaux, Haugh, & Greenwood, 2018). Their immediate safety and survival needs are more or less met but there are little if any possibilities for them to find the psychological determination and economic resources that would enable them to move out of the camps and obtain better living conditions. Furthermore, with the continued increase in the number of refugees arriving, the under-resourced camps where they stay are rapidly filling up, making living conditions very difficult and the overall situation unsustainable. While the objective of facilitating their migration should not be relinquished and must remain a priority for the European Commission and member state governments, it seems urgent to look for a more effective way to support and empower these communities and end their suffering, once and for all. Many displaced people have chosen neither the host country nor the camps they are stuck in. Furthermore, in terms of their integration profiles, while some are ready to leave their homes on a permanent basis, many others want to go back when the situation allows it. Those who have managed to get beyond camps into countries, where they can eke out a meagre existence, are often there because there was no better alternative. They feel culturally isolated, have a distorted self-identity caused by a lack of connection with both the people in the new country and those whom they left behind, a circumstance of great emotional and psychological distress that can occasionally lead to radicalization.

There are many charities, Non-Governmental Organizations (henceforth, NGOs) and support groups already helping refugees with a wide range of difficulties, ranging from basic survival needs in the holding camps, through to education, employment and social inclusion. A particularly innovative example is that of Techfugees¹, an NGO coordinating the response of the international technology community to provide solutions for and with displaced people. It would be unfair to say that progress is not being made. However, something more fundamental is required that can be applied to help the refugees in the camps and goes beyond basic survival: something that prepares them to leave and participate in their new community, whichever that may be, in a more equalitarian and productive manner. In this article, the fundamental notion of social inclusion is explored and will be analysed with a view to redefining it to reflect the knowledge-based network-oriented nature of modern European society. As a result, a proposal for how refugees can embrace this new type of social inclusion will be presented. It is argued that such an inclusion mechanism can offer refugees a pathway, helping them to belong to a larger, more universal society, more so than a geographically bound one, with the associated political, economic and psychological benefits that come with it.

According to the World Bank Group², social inclusion can be defined as follows: “the process of improving the terms on which individuals and groups take part in society—improving the ability,

¹ <https://techfugees.com/about>

² <https://www.worldbank.org/en/topic/social-inclusion>

opportunity, and dignity of those disadvantaged on the basis of their identity.” Obtaining such inclusion can be seen to be a fundamental objective for refugees, as they search for new and safer places to resettle, whether temporarily or permanently. In an ideal case, they are able to reach an economically and politically stable country, and cover much more than their immediate survival needs, so that they can then begin to adapt to their new surroundings, start relevant learning/training (for example, language and job-related skills), and enter the employment market. Once they are working, and their overall situation improves, these people will be in a position to integrate into the society where they obey laws and pay taxes, which gives them access to the same services that any other citizen has (without losing their own identity and culture of origin). However, the problem that was noted above is that, as the number of refugees trying to enter Europe has increased, certain resistance and even hostility have inevitably grown on the part of host countries, and access to them is more difficult than ever. The refugees are stranded in camps en route to Europe and stuck in limbo and, therefore, unable to move forward to a better life or backward to where they came from. Given this complex scenario, the question can be raised as to whether refugees can achieve any degree of inclusion, in the general sense of belonging to and participating in a society that provides them with the same support as anyone physically there (e.g., health care, education, employment and, at a more psycho-social level, gain a sense of identity and dignity with opportunities for self-improvement). In the next section, this question is considered, and an answer is provided in terms of a new type of social inclusion.

2. Virtual Social Inclusion

The term “society” is used generically to refer to a grouping of people living together, in a more or less structured, geographically located community (Castells, 2000). However, it is argued here that it is necessary to reframe what we mean by “society” and consider it in different terms, which replace geographical constraints with other more contemporary ones. In the 1970s, sociologist Daniel Bell (1973) introduced the notion of “information society” to refer to a social grouping around the use of knowledge rather than that of belonging to any given country. Castells (2006) notes that modern society has been undergoing a conceptual transformation for more than two decades, moving away from an industrial society to one based upon a new technological paradigm. Similarly, Drucker (2001) refers to “knowledge society”, which can be characterised in terms of three key elements: firstly, that it is borderless (knowledge can flow easily across computer networks); secondly, that it possesses upward mobility (anyone with the relevant education can access it); and thirdly and finally, that it contains the potential for failure as well as success (access to the knowledge therein does not imply a correct and beneficial use).

While the two terms “information society” and “knowledge society” were used interchangeably at first, as David & Foray (2003) and Burch (2006) noted, the distinction needs to be emphasised between information and knowledge. These authors argue that the former refers to structured and formatted data, and the latter to the capacity to use the former for intellectual or manual action. A decade before them, Courier (1990) differentiated between the two terms, where Information society focussed on the content, in terms of collecting, processing, and communication, and Knowledge society, in terms of the agents who use it. David & Foray (2003) also noted the appearance of knowledge-based communities, which they define as networks of individuals who share knowledge and skills above and beyond the limits of traditional organisations, countries, etc. As they highlighted, knowledge, when reduced to information, can travel very quickly and be accessed by large numbers of people. It can be argued, therefore, that the use of Information and Communication Technology (ICT) to access and participate in these knowledge-based communities enables people to be part of a knowledge society that is not limited by geographical or political constraints. Castells (2006) argues that technology is a necessary but not sufficient condition for this kind of society. He states that the use of information to generate knowledge, power and wealth is dependent upon a structural organization of the underlying technology. David & Foray (2003) discuss the skill set which is necessary for participation in this knowledge society, highlighting those related to information technology and

also soft skills (e.g., teamwork, communication, learning to learn, knowing what we do not know, awareness of heuristic bias that can affect reasoning, etc.).

Returning to the case of refugees, inevitably, the possibilities for any of them stuck in holding camps to achieve “real” social inclusion (henceforth, RSI) in a given country, in the sense of being physically located there with the equivalent rights and duties as native citizens, are extremely limited. This starts with the need to obtain complex country-specific legal authorization and related documentation, whose renewal is uncertain and, therefore, any kind of middle-term planning on their part becomes difficult, if not impossible, and many other challenges and difficulties follow, as mentioned above. Given this extraordinarily complex panorama, the hypothesis explored here is whether refugees in holding camps could use their (mobile) technology to obtain at least part of the main benefits of associating with a knowledge society, which includes access to information, exchange of communication, education, and employability, to name a few affordances. This would be a potential alternative to refugees’ forced inactivity in the camps and the enormous vital investment of time and effort in the preparation to live in the next country. It would presumably increase and diversify the countries that they could access and facilitate a more positive initial response from them.

This idea is not so far-fetched as it might initially appear. A key feature of modern society is its online or networked-structure, where an ever-increasing amount of our social interaction and access to services (e.g., those related to healthcare, education and employment) takes place online. We are arguably participating in the knowledge society. Hypothetically speaking, if it were possible to scaffold and structure refugee access to these online services, and provide them with the relevant skills and tools, they might be able to meet an important part of their needs. This would also provide them with a sense of belonging to a large online social community that would arguably facilitate a new sense of identity, without having to lose the old one, dignity and opportunities for self-improvement. This form of inclusion is defined here as “Virtual Social Inclusion” (henceforth, VSI).

The use of the prefix virtual- for an existing service is not new and refers to accessing it online. For example, the virtual ERASMUS+ programme³ enables young people to participate in relevant intercultural experiences online, as part of their formal or non-formal education, without leaving their country of origin. Similarly, “virtual mobility” is a term⁴ that in academia refers to online experiences of collaboration between students and teachers from different institutions. Finally, “virtual attendance”, as defined by Read et al. (2009), refers to a process that uses a technological mechanism to provide a considerable part of the advantages of attending a taught class without the need for students to displace themselves to where it takes place. Apart from the shortcomings of RSI, for VSI to be an alternative, its affordances would need to be comparable to those of RSI. So, the questions should be asked: is VSI possible? If so, what would be needed for it to become a reality?

The results of analyses have already been presented in the literature to demonstrate the value that ICT has for refugees who already have reached their destination of choice (e.g., Andrade & Doolin; 2016). As they argue, ICT provides a bridge for refugees: “to participate in an information society, to communicate effectively, to understand a new society, to be socially connected, and to express a cultural identity”. It could be argued that refugees already use such services to stay in contact with their families and friends in their country of origin and to find information and access other services that might be of value to them. However, while these affordances are a step toward VSI, they are not sufficient in and of themselves (cf. Castells, 2006). They are very limited, and their access and use require knowledge and skills that refugees may not have, and imply expenses that they cannot meet. Online access to services in a given country can be a complicated task, sometimes even for natives, often requiring digital certificates, the use of virtual private networks, or access from restricted ranges of network addresses.

It is argued here that for VSI to become a reality, as a way to access and participate in the knowledge society, four things are needed: firstly, the services would have to be available mostly for free, at least to begin with, but completely online and all encompassing. Secondly, an ICT architecture

³ https://europa.eu/youth/erasmusvirtual_en

⁴ https://en.wikipedia.org/wiki/Virtual_mobility

would be needed to facilitate access to the services, above and beyond their presence online. Such an architecture would need to provide a safe and secure access to them, which protected identity and enabled financial services to be handled. Thirdly, a legal and political framework would be needed to support and validate the aspects of the system previously highlighted. It is for this reason that VSI cannot be proposed in a vacuum. Since many refugees are trying to access the Eurozone, it would make sense that initially this model was contextualised and piloted at a European level, where existing legal and political support mechanisms could scaffold the refugees and their presence online. Fourthly and finally, training and support would be required to help the refugees learn to use VSI and its related services. The reality of refugees living in camps is far from ideal in this respect. Their large number would require a scalable and robust architecture, where they could use their mobile devices to register with the system and subsequently be provided with recommended services that could help them right from the beginning to access administrative processes, learning resources and obtain guidance regarding the best ways to access other services (such as employment) online. At this moment in time, the opportunities for online employment are distributed between different employment portals within Europe. For example, EURES⁵ lists over a million jobs, some of which can be undertaken online. Other sites like EuroJobs⁶, Indeed⁷, and thebalancecarrers⁸ also include online employment opportunities. These are examples of portals that list job vacancies only in English, but there are others that include offers in other European languages. The problems that refugees currently encounter with such online employment services are the presence of related but largely irrelevant content intermingled in a confusing maze of information and, above all, the divergence between the underlying ‘Western bias’ of the information and the diverse social, educational, and technological cultures of all these different potential users.

Finally, it should also be noted that such a proposal cannot take the form of a “backdoor” for refugees to participate in an “underground economy” in EU countries, in such a way that it undermines the education and employment possibilities of nationals there. The scenarios need to be sustainable and beneficial both for refugees and for the European countries that facilitate the need for such a workforce. This VSI initiative would arguably be well received by all parties involved, displaced people, the European Commission, and its member states, since it would provide the much-needed support without depending upon physical presence in the countries which, as was noted above, has multiple problems associated. In the next section an educational framework is described that can be seen to be central to the success of VSI.

3. An Educational Framework for Virtual Social Inclusion

VSI, as defined in the previous section, could enable displaced people to participate in the evolving knowledge society that unites and underlies European countries, without requiring them to physically be in any of them. This form of inclusion, in a similar way to other “virtual” processes (Virtual ERASMUS+, Virtual Mobility, Virtual Attendance, etc.), would arguably help refugees to attain some of the advantages of RSI, sparing them the many efforts and anxieties involved when fleeing from their country of origin nowadays. Key requirements to be able to make use of VSI are possessing the relevant language communicative competences and technical and work-related skills, not only to access the infrastructural services of the given country, but also to undertake the employment opportunities encountered there. In order for the refugees to meet these requirements, an educational framework is required as part of VSI.

While a small proportion of refugees might be bi/multilingual and possess the necessary skill-set to work online, if they were able to find such work, most do not. In a way, this is paradoxical, since education is required to help refugees learn the relevant knowledge and skills but, generally speaking,

⁵ <https://ec.europa.eu/eures/public/homepage>

⁶ <https://www.eurojobs.com>

⁷ <https://www.indeed.com/q-Online-jobs.html>

⁸ <https://www.thebalancecareers.com/work-at-home-employment-opportunities-2064309>

education is not free. If they could engage in VSI and work online, they could earn the money necessary to pay for their education. However, the problem, and hence the source of the paradox, is that they lack the knowledge and skills to get started. Open educational resources (OER) and practices (OEP) could represent a way to avoid this paradox which, when accessed from their mobile devices, would provide them with a degree of “mobile openness” to obtain what they need. Such education, if appropriately structured, scaffolded and certified, could enable refugees to begin a VSI process. Once they have a basic revenue stream, the open education (and other freely accessible services) could be supplemented with paid alternatives. This would be an iterative process, where OER and OEP could help refugees to start to gain the relevant language and technical skills and, therefore, obtain work online in due course. Once they have an income, they can carry on using such free services or, alternatively, pay to gain access to more specific and relevant ones, improve their competences, and encounter better employment.

Presenting open education as an appropriate solution to help refugees make the most of VSI is to grossly simplify the issue. The OER and related OEP movements have been around for a very long time in a large range of different forms (e.g., Geser, 2007; Bliss & Smith, 2017). Of all the initiatives undertaken, it is arguably massive open online courses (MOOCs) that constitute the learning and training modality with the most noticeable impact. These online courses combine both OER and OEP in a structured and temporised fashion. While the literature highlights a range of limitations with these courses (e.g., Atiaja & Proenza, 2016), the very large body of academic literature about MOOCs, and the immense volume of courses and participants are a tribute to their staying power and relevance in the modern educational landscape. However, even though MOOCs are free and offer a viable general-purpose approach to online learning, they are not typically being selected by refugees as a chosen vehicle for learning. Why should that be the case?

The following seven reasons can be provided as an answer to this question (Read, 2014; Read & Barcena, 2014; Read et al., 2018). Firstly, most MOOCs are xMOOCs and have a pedagogical structure that resembles that of standard online courses. As such, these courses are not adapted to the learning styles of most refugees. For example, those that come from the Middle East or North of Africa are often more accustomed to a face-to-face oral approach to learning and, as experience shows, they can have difficulties following, or be reluctant to participate in, an eminently written, often rather impersonal, online course. Secondly, a new type of digital literacy is required that encompasses the relation that refugees have with online resources and activities (Traxler, 2018; Traxler et al., 2018). An important part of learning in a MOOC requires interpersonal interaction in the courses, especially but not only in cMOOCs. The social nature of MOOCs is common in these massive courses with a potentially enormous imbalance in the teacher to participant ratio. For a course to succeed under these circumstances, a common interrelational structure and a certain level of trust between the participants are needed, giving rise to what is known as a form of “collective intelligence” (Levy & Bononno, 1997).

Furthermore, a lot of refugees are not comfortable with online interaction and, if they have been forced to leave their countries of origin and are concerned that they might be made to return, they may not want to undertake any activities online that might reveal their identities. Fortunately, progress has been made in this area thanks to the development of Blockchain, that can act as a security layer that facilitates such online interaction while, at the same time, protecting their identity. As Grech & Camilleri (2017) observe, this distributed system of cryptographically linked records offers a number of advantages over current online data storage and sharing mechanisms, which include self-sovereignty, trust, transparency and provenance, immutability, disintermediation, and collaboration. By using a blockchain, it would be possible for refugees to store their sensitive personal information online and share what they want with whoever they want, without running any security risks.

Thirdly, the certification model present for most MOOCs does not provide refugees with learning results that are easily accredited by formal educational institutions or employers. Furthermore, many MOOC participants find the recognition of status in the community, in terms of “Karma”, badges, etc., to be of little value in the ‘real world’. A solution to this problem may come from work that is currently being undertaken in the area of micro-certificates, as a general-purpose certification model that could

enable such learning to be recognised and generally accredited internationally (Camilleri & Rampelt, 2018). The granularity of the educational process here is vital, since a refugee will be more willing to study and become accredited if a single certificate leads to some kind of tangible employment. Further certificates can be gained in an iterative process as part of a modular study programme. Any employment in a VSI context would need to be undertaken and remunerated completely online. Furthermore, once a refugee is earning money, s/he can more easily access other services, being able to actually pay for them. This also has to be an iterative process: early engagement would need to be supported locally at refugee camps, where pilot programmes can be undertaken to help refugees learn online, so that they can subsequently find and undertake work online. As their experience grows, the sophistication of their interactions is expected to increase as well.

Fourthly, most refugees have had to flee their countries in a hurry and were only able to bring with them a few belongings. Hence, they do not have computers to use to access and study in these online courses. However, they do have mobile devices (mostly smartphones although some have tablets), but a lot of MOOCs do not deploy well on these devices, making their use on small screens, with sporadic network connections, limited battery life, etc., very difficult. Fifthly, refugees may not value online learning and are particularly reluctant to take part in MOOCs because their evaluation and certification still have a large scope for improvement and generally lack official recognition. Sixthly, daily life in refugee camps is typically noisy and chaotic, which makes any attempt at studying, online or otherwise, difficult to undertake. Seventhly and finally, the complex traumas and dilemmas that refugees have had to face often counterbalance the motivation and effort required for learning, particularly if what they will obtain at the end of their study is not an immediate part of a permanent or desired life project.

Some steps have been taken in the direction of providing an educational framework for VSI in the MOONLITE (Massive Open Online courses eNhancing Linguistic and Transversal skills for social inclusion and Employability; Read et al., 2018; Traeger et al., 2018) project⁹. Amongst other goals, it focuses on how to design, develop and apply inclusive MOOCs for displaced people, supporting their specific needs and circumstances, to potentiate their RSI through education and access to the employment market. Such an initiative can be seen to be a precursor to the establishment of VSI, since the majority of the refugees targeted are already in the destination country, or on their way there, and not representative of the majority who are in holding camps. As part of this project, one of the partners, UNED, worked closely with several different not-for-profit organisations, NGOs, foundations, and refugee support groups in Spain, who teach and support refugees, to identify a set of criteria to make MOOCs more socially inclusive (Traxler, Read & Barcena, 2019). This “inclusiveness” is not a binary concept, where a course qualifies, or doesn’t, as being inclusive, but reflects a scale to help calibrate the degree to which a course can be used effectively by different and diverse groups. The criteria can be classified into five categories: pedagogy, linguistics, socio-culture, technology, and institutionalization. These criteria were fine-tuned following a series of face-to-face pilots. A rubric was designed as a result of this process to enable socially inclusive Language MOOCs to be developed in as transparent and systematic a way as possible (Read et al., in process). The learning scenarios undertaken with refugees in the MOONLITE project demonstrate that carefully designed and scaffolded online courses can be effective for displaced people.

However, it should be noted that the majority of the refugees who took part in these courses were already located in Spain, their final destination country. They were, therefore, motivated to learn Spanish and obtain the sociocultural know-how that would help them achieve RSI in this country. The question can be asked as to whether refugees stranded in camps with little or no chance of actually migrating to Spain would have had the same levels of motivation to learn. Arguably not, at least not a priori. VSI is not something that anyone is already familiar with, so in order for refugees to be motivated to learn, they need to be provided with dedicated support, particularly at the beginning. As mentioned above, this process would need to be established iteratively, whereby small pilot groups

⁹ ERASMUS+ project number: 2016-1-ES01-KA203-025731.

could start an incremental adoption process of VSI, leading to a new socioeconomic model based around participation in the knowledge society.

The educational framework proposed here is central to the success of VSI, since it provides a mechanism for refugees to benefit from a 'level playing field', whereby they can gain the basic knowledge and skills necessary to compete in the knowledge society. Furthermore, it can also provide the training required as the needs of such a society change over time as part of a life-long learning process. There is room in such a framework for a range of educational services, the majority of which are free, but others can be paid for, something noted above that can become possible as refugees earn money.

4. Conclusions

In this article, the realities of the refugee situation have been presented together with the difficulties that they encounter when they try to reach and settle in their destination countries. It has been argued that what has been referred to here as real social interaction, or RSI, is unlikely to happen for the majority of these people. Given the extended nature of the information society within Europe, and the emerging knowledge society, where the online economy represents an important part of our modern lives, RSI could, at least to some extent, be replaced by its virtual counterpart, termed virtual social inclusion, or VSI. For VSI to become a reality, four things are required. Firstly, relevant open educational services would need to be available online. In a general sense, learning, training, and support, based around OER and OEP, are the backbone of this framework, to help refugees acquire the knowledge, languages and technical skills necessary to participate online in the knowledge society. In more specific terms, the educational materials, activities, and certification would have to be disaggregated to provide a modular structure that enables refugees to learn what they require for their immediate needs, both linguistic and skill-related, with a view to employment.

As noted above, micro-credentials play an essential role here, since they provide a way for refugees to have an 'open educational passport' logging what they have learnt. Secondly, online employment contracts would need to be available. The record of a person's learning is conceived to be a necessary entry point for gaining an online employment contract. Once a contract is successfully completed, a refugee would be remunerated and gain recognition within the VSI community. This would complement any recorded learning in the passport and serve to further guarantee his/her skills. Thirdly, a service-based technological infrastructure would be needed to manage the two previous points and collate and highlight the relevant services for refugees (e.g., learning and employment opportunities), and guarantee the contractual and economic details. As has been noted previously here, given that the majority of refugees have mobile devices as their only access to online services, it is essential that the VSI framework deploys well on them, making use of mobile openness. Fourthly, a legal and political framework would be needed for refugees to work online. In the same way that the personal details of refugees are protected here, there would be a need to guarantee that the companies that offer online employment contracts are both provided with the tools to remunerate for said activities and held responsible that payment is actually made.

The technology for VSI largely exists although some engineering development will be needed. The Internet can provide the backbone to access the structured online services and a recommender system could help the refugees receive information on services that would be most relevant to them. Exactly what services the refugees will require depends upon their personal circumstances, previous learning and work experience. Their precarious social and economic situation within the holding camps would make it necessary for them to receive considerable scaffolding to begin with and make extensive use of free educational and support services. Once they begin to work and receive economic rewards, they can make use of other paid services. In order to protect their anonymity but let them interact online at the same time, a blockchain solution would be required to store personal data about the refugees and their relation to VSI. Economic transactions in this framework, such as remuneration

for completed contracts, could be handled via standard banks with online services where a refugee has an account, or using cybercurrencies like Bitcoin where this is not possible.

As the current form of RSI gives way to, or is complemented by, VSI, and the emerging knowledge society becomes consolidated, perhaps a notion of “Virtual Citizenship” will arise to acknowledge individuals who contribute to the development, welfare and economic growth of a given society online, and perhaps the distinction between belonging to a geographically limited notion of society will be substituted by a broader, more ‘liquid’ one. A fundamental part of VSI is the presence of an educational framework that can combine free and commercial teaching and learning processes. This framework has been structured around OER and OEP in specially designed and developed inclusive MOOCs and will be extended to the forthcoming open educational modalities that will no doubt follow. Since education is the universal human right that potentiates people’s ability to function effectively in society, the educational framework central to VSI will enable refugees to be on a ‘level playing field’ in the online knowledge society. It is only from the equality of opportunities envisaged here that we can strive together towards the limits of our human collective potential.

References

- Atiaja, L. A., & Proenza, R. (2016). The MOOCs: origin, characterization, principal problems and challenges in Higher Education. *Journal of e-Learning and Knowledge Society*, 12(1).
- Andrade, A.D. & Doolin, B. (2016). Information and communication technology and the social inclusion of refugees. *MIS Quarterly* 40(2), 405-416.
- Bell, D. (1973). *The coming of post-industrial society: a venture in social forecasting*. New York: Basic Books.
- Bliss, T.J. & Smith, M. (2017). A Brief History of Open Educational Resources. In R.S. Jhangiani & R. Biswas-Diener (eds.) *Open: The Philosophy and Practices that are Revolutionizing Education and Science*. London: Ubiquity Press, 9–27.
- Burch, S. (2006). The Information society—the knowledge society. *Word Matters*, May. <http://maaz.ihmc.us/rid=1HN7Q0J4F-1XYWQ9W-JDQ/The%20Information%20Society.doc>
- Camilleri, A., & Rampelt, F. (2018). Assuring the Quality of Credentials to Support Learning Innovation. *13th European Quality Assurance Forum. Broadening the Scope of QA*. Vienna University of Economics and Business. <https://eua.eu/component/attachments/attachments.html?id=1736>
- Castells, M. (2000). Materials for an exploratory theory of the network society. *The British Journal of Sociology*, 51(1), 5-24.
- Castells, M. (2006). Introduction. In M. Castells & G. Cardoso (eds.) *The network society: From knowledge to policy*. Washington, DC: Johns Hopkins Center for Transatlantic Relations, 3-23.
- Courrier, Y. (1990). Information services in crisis and the post-industrial society. *Education for Information*, 8(3), 223-237.
- David, P.A. & Foray, D. (2003). Economic Fundamentals of the Knowledge Society. *Policy Futures in Education*, 1(1), 20–49.
- De la Chaux, M., Haugh, H., & Greenwood, R. (2018). Organizing refugee camps: “Respected space” and “listening posts”. *Academy of Management Discoveries*, 4(2), 155-179.
- Drucker, P. (2001). The next society. *The Economist*, 52.
- Geser, G. (2007). *Open Educational Practices and Resources*. OLCOS Roadmap.
- Grech, A. & Camilleri, A.F. (2017). Blockchain in Education. Luxembourg: *Publications Office of the European Union*, 132 S. - (JRC Science for Policy Report) - URN: urn:nbn:de:0111-pedocs-150132.
- Read, T., Ros, S., Rodrigo, C., Pastor, R. & Hernandez, R. (2009). The UNED ICT Architecture for ‘Virtual Attendance’. In *M2009: Proceedings of the 23rd ICDE World Conference on Open Learning and Distance Education*, Maastricht.
- Read, T. (2014). The Architectonics of Language MOOCs. In E. Martín-Monje & E. Bárcena (eds.), *Language MOOCs: Providing learning, transcending boundaries*. Berlin: De Gruyter Open, 91-95.
- Read, T. & Bárcena, E. (2014). MOOCs and open higher education: The case of UNED. In G. Palazzo (ed.) *MOOCs, PLEs and eLearning Platforms*. Bilbao: Universidad del País Vasco, 495-509.
- Read, T., Sedano, B. & Barcena, E. (2018). Tailoring Language MOOC design for migrants and refugees. In T. Read, S. Montaner & B. Sedano (eds.) *Technological Innovation for Specialized Linguistic Domains: Languages for Digital Lives and Cultures*. Proceedings of TISLID’18. Beau Bassin, Mauritius: Editions Universitaires Européennes, 383-396.
- Traeger, C., Löwe, C., Bárcena, E., Bick, M., Camilleri, A.F., Codreanu, T., Creelman, A., Jansen, D., Sedano Cuevas, B., Read, T., Traxler, J. & Zourou, K. (2018). *Exploiting MOOCs for Access and Progression into Higher Education Institutions and Employment Market*. MOONLITE Project Report O3. https://moonliteproject.eu/wp-content/uploads/2018/10/MOONLITE_O3_Report.pdf
- Traxler, J. (2018). Digital Literacy: A Palestinian Refugee Perspective. *Research in Learning Technology*, 26.
- Traxler, J., Read, T. & Barcena, E. (2018). Mobile open social language learning: Towards a paradigm shift. In T. Read, S. Montaner & B. Sedano (eds.) *Technological Innovation for Specialized Linguistic Domains: Languages for Digital Lives and Cultures*. Proceedings of TISLID’18. Editions Universitaires Européennes, 397-406.
- Traxler, J., Read, T. & Barcena, E. 2019 in press. Refugees from MENA Learning Languages – Progress, Principles and Proposals. In Reinders, H., Littlejohn, A, Coombe, C., & Tafazoli, D. (eds.) *Innovation in language learning and teaching: The case of the Middle East and North Africa*. London, UK: Palgrave Macmillan.
- UNHCR. (2017). Global Trends. *Forced Displacement in 2017*. <http://www.unhcr.org/5b27be547.pdf>