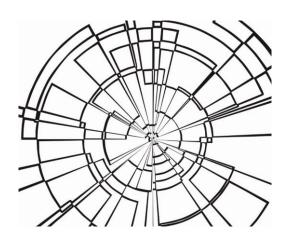
NYELWILÁG

Language World

A BUDAPESTI GAZDASÁGI EGYETEM IDEGEN NYELVI ÉS KOMMUNIKÁCIÓS INTÉZETÉNEK SZAKMAI KIADVÁNYA

PERIODICAL OF THE INSTITUTE OF FOREIGN LANGUAGES AND COMMUNICATION OF THE BUDAPEST BUSINESS SCHOOL



19

Editor in chief

András Kéri

Associate editor

Réka Asztalos

Editors

Ágnes Loch, Gyula Hegedüs

Reviewers

Maria del Carmen Arau Ribeiro
Réka Asztalos
Eva Cislerová
Tamás Demény
Gyula Hegedüs
Monika Hrebackova
Ágnes Loch
Margarida Morgado
Robert O'Dowd
Martin Steffl
Jana Zverinova

Address (Szerkesztőség címe):

1054 Budapest, Alkotmány u. 9-11., Hungary

ISSN 1786-0636

Main Publisher (Felelős kiadó): Sára Csillag

Készült a BGE Külkereskedelmi Főiskolai Kar házi nyomdájában.

Printed at the printing shop of the Faculty of International Management and Business Studies

Format: A/4 Példányszám: 300

The impact of interconnectedness: culture, language, communication

JUDIT HIDASI

Budapest Business School

"Every time we speak we perform a cultural act." Kramsch (1993: 9)

It is assumed that we live in a world of connectedness due to our being linked (Barabási 2002, 2010; Newman, Watts and Barabási, 2006) through our networks. But our human interconnectedness would not work without three significant attributes of our human nature: culture, language and communication. Their intersections and their overlapping nature can be best studied in everyday as well as in education- related interactions. The strong interdependence of cultural heritage, of languages (both native and learned) and of social traditions in the functioning and effectiveness of communication have an impact on the responses that we give to the newly emerging challenges of the globalizing context that we live in. These issues are interrelated and interconnected with each other through a common denominator, namely "cultural-mental programming" which increasingly requires "reprogramming efforts" in order to adapt to the occurring communication and interaction needs within the ever-intensifying shift from an intercultural to a multicultural environment in communities, in business and in workplaces. This contribution does not offer ready solutions but rather serves as fuel for further discussions.

Keywords: interconnectedness, cultural-mental programming, language and communication, cultural heritage

Interconnectedness as an ever-intensifying phenomenon

Interconnectedness as a phenomenon existed long before the IT revolution, but the IT revolution and digital technology developments have speeded up the process and functioning of interconnectedness. Interestingly, the notion itself was first put forward not by a scholar but by a novelist in 1929; Frigyes Karinthy (a Hungarian literary genius of the twentieth century) in his volume of short stories titled *Everything is Different* which included the story "Chain-Links", which investigated in abstract, conceptual, and fictional terms many of the problems that would captivate future generations of mathematicians, sociologists, and physicists within the field of network theory. In particular, Karinthy believed that the modern world was 'shrinking' due to this ever-increasing connectedness of human beings. He assumed that despite great physical distances between the globe's individuals, the growing density of human networks made their actual social distance far smaller. As a result of this hypothesis, Karinthy's characters believed that any two individuals could be connected through at most five acquaintances, described as follows:

To demonstrate that people on Earth today are much closer than ever, a member of the group suggested a test. He offered a bet that we could name any person among earth's one and a half billion inhabitants and through at most five acquaintances, one of which he knew personally, he could link to the chosen one (Barabasi, 2002: 26).

Karinthy has accordingly been regarded as the originator of the notion of six degrees of separation, an idea that both directly and indirectly influenced a great deal of early thought on social networks, whereby everyone and everything is six or fewer steps away, by way of introduction, from any other person in the world, so that a chain of a "friend of a friend" statements can be made to connect any two people in a maximum of six steps. Albert-László Barabási, another Hungarian genius but in the field of science, duly pays tribute to his countryman in the 2002 volume that brought him international fame (Barabási, 2002). His later works (Newman, Watts and Barabási, 2006; Barabási

2010) elaborate further on the interconnectedness and network concept with application to a great many fields of science and everyday life, examining the relationship of complexity and networks and how they affect our lives.

However, our human interconnectedness would not work without three significant attributes of our human nature: culture, language and communication. Globalization and the European integration process notwithstanding, in two fields, namely in culture and language, efforts aimed at maintaining diversity are also apparent. We witness a strong interdependence in the functioning and effectiveness of communication of cultural heritage, of languages (both native and learned) and of social traditions.

21st century trends and adaptation requirements

With respect to the world surrounding us as well as the different walks of life, lifestyles, objects and behavioral patterns in it, these days we perceive and witness two worldwide tendencies. One of these tendencies points towards unity, whereas the other towards its opposite, i.e. diversity (Hidasi, 2008b). On the one hand, what we experience is that in the developed world people more or less dress in the same way, young people mostly listen to the same songs, and surround themselves with very similar objects, be they smart phones, portable players or any other novelties. At the same time, bigger towns offer an unprecedented range of culinary delights and workplaces and residential areas are increasingly multicultural. The first tendency of unification is generally attributed to globalization (Lewis, 2001), while the second tendency can be connected to the process of diversification. In other words, multiculturalism is perceptible in all countries of the world thanks to the intensification of both mobility and migration (Hidasi, 2011). Irrespective of whether multiculturalism in a given country, community or region is temporary or permanent, challenges related to interculturalism will lead to conflicts in the value systems relating to the formation of opinions about healthcare and educational services or to residential and living conditions among groups of diverse cultural backgrounds, workplace communities, residential communities and the individuals themselves who constitute these communities (Hidasi, 2008a). Difficulties caused by communication about these issues are also prone to appear even if the people involved in such discussions communicate about these topics using the same language (Földes, 2007).

While diversification is connected to internationalization and refers to the fact that apart from a given nation's or country's culture, other nations' or countries' cultures should likewise be present in a geographical area, globalization exhibits a countertendency and denotes unification on a global scale. Linguistic globalization is taking place right in front of our eyes. The expansion of the English language is a clear example of a cause and effect relationship: globalization causes English to spread, and the spread of the English language reinforces globalization. Put differently, the English language constitutes both the result and the means of the same process, notably that of globalization. At the same time, it must also be noted that knowing a mutually-understood language does not necessarily mean knowledge of some commonly used terminology or shared rules of communication. The imperative of "speaking the same language" and "using the same language" is especially marked in multicultural and multilingual Europe (Falkné-Bánó, 2001).

The ever-intensifying shift from intercultural to multicultural environment in communities, in business, in work places and in educational settings requires a permanent need to adapt to changes. Hence flexibility and adaptability are those core competences that serve as prerequisites for survival and for keeping pace with the required changes. Suffice to remind the reader of the words generally attributed to Darwin, "It is not the strongest of the species that survives, nor the most intelligent, it is the one that is most adaptable to change".

Are we ready to address internationalization needs in education?

Education experts and practitioners confirm that the foremost aim of internationalization – particularly in higher education – is to benefit from sharing knowledge and skills, and from the exchange of the experiences of institutions in different countries – in order to best adapt to changes of our changing world. This can be achieved by addressing diverse areas of the educational domain whilst operating international educational programs that cover foreign language teaching (FLT), communication, intercultural interactions, and the like.

For a better understanding of the internationalization possibilities of education we turn to the model of the GATS (General Agreement on Trade and Services) modes to demonstrate the similarities in approaches and solutions because it helps to understand the different modes as for transfer of people and services. If we look at education as a form of delivering a service to consumers (students) then this model can be transferred to the domain of education and used as a tool for systematizing the possibilities. GATS as a treaty of the World Trade Organization (WTO) entered into force in January 1995 as a result of the Uruguay Round negotiations. The agreement includes four modes of supply for the delivery of services in cross-border trade: presence of natural persons; consumption abroad; commercial presence; cross-border supply. Adapting these modes into the domain of education, we come to the four-mode model of educational supply for the delivery of cross-border education.

A four-mode model of educational supply

| GATS modes | Educational adaptation | |
|---------------------------------|---|--|
| M1. presence of natural persons | teachers move in order to deliver educational services abroad | |
| M2. consumption abroad | students move to institutions abroad to study for a period of time | |
| M3. commercial presence | program / course / module is transferred and delivered on site in the foreign country | |
| M4. cross-border supply | virtual mobility / e-learning no-one moves physically | |

Table 1. A four-mode model of educational supply.

Upon closer examination, this adaptation suggests that when talking about international or cross border education, we tend to think in terms of teacher mobility (M1) or student mobility (M2) in the traditional sense. In a digital world, however, emphasis is increasingly placed on "exported" educational programs or franchisings (M3) or generally on e-learning (M4). In the practice of Budapest Business School, we have had examples of both versions of (M3). For a couple of years, the Business Economics Program of the Faculty of International Management and Business was "exported" to EMTE Sapientia University in Cluj (Romania) and run there with the same content leading to the same degree – until the launch and accreditation of an independent program of Sapientia University with a partly similar content by the Romanian authorities. At the same time, we had an MA franchise program of Anglia Ruskin University running for some 15 years in International Business at the graduate center of BBS.

It is not by chance that since 1995, at the subsequent conferences of European ministers responsible for higher education, recommendations have regularly included directives on the importance of not only improving the role of information communication technology (ICT) in education but also enhancing the impact of virtual mobility in the internationalization of education. Despite the benefits in terms of cost and accessibility anywhere, anytime, anyplace as well as matching individual needs as for the pace and tempo of learning, the demand for traditional mobility seems to remain a growing market both for students and for professors (Fallon, 2013).

The explanation for this growing need for advancing traditional mobility is twofold: on the one hand, expectations related to the almighty role and impact of IT solutions have not been fully met; on the other hand, the benefits of real-life mobility have not so far been successfully compensated by virtual interactions.

Among expectations that have partly failed, those listed below refer only to IT solutions that were supposed to have a great impact on the improvement of education:

- Machine-translation the godfather of which was Jehoshua Bar-Hillel (1951) (cf. 1st International Conference on Machine Translation 1952 at MIT) – has developed significantly, but still in many instances "google translation" cannot satisfy quality expectations.
- Distance learning, popular as it might be for particular reasons in many regions of the world (in Canada, South-Africa, and Australia, for example), has been increasingly transformed into an element of blended learning, the mix of distance and in-class, or tutor-to-student educational constructs which combine self-study with relevant classroom material.
- Digital libraries are necessary and serve many specific purposes, but in the developed countries they still cannot replace traditional libraries; consumers still demand access to books. In the educationally-advanced countries of East Asia like Japan, South-Korea and Taiwan, traditional libraries still have their place in academic settings and are constantly developing.
- E-learning turned out to be not the almighty substitute for contact-teaching, but rather a complementary tool. The much advertised and triumphantly publicized MOOCs (massive open online courses) which took the world by storm in 2012 (Pappano, 2012) were clearly destined to transform learning. Examples of the potential for transformation can be found in MOOC providers often in partnership with the big learning establishments as it can be seen in Table 2.

| Place of origin | Institution | MOOC |
|-----------------|-------------------------------|---------------------|
| USA | Stanford University, Johns | Coursera |
| | Hopkins University, etc. | |
| USA | Stanford University | Udacity |
| USA | MIT, Harvard, Berkeley etc. | EdX |
| Great Britain | Lancaster University, | FutureLearn |
| | University of Aberdeen, etc. | |
| Europe | European Commission | OpenEducationEuropa |
| Germany | iversity GmbH, Stifterverband | iversity |
| · | für die deutsche Wissenschaft | |
| Hungary | Óbuda University | K-MOOC |
| Hungary | University of Miskolc | MeMOOC |

Table 2. MOOC providers in partnership with learning institutions.

The number of MOOC courses has exceeded 4,500 globally by January 2016 and is growing by each day (*State of the MOOC*, 2016). Although they bear many markers of convenience, it was clear early on that MOOC programs cannot be substitutes for traditional college or university education – neither in terms of effectiveness, nor in terms of quality or academic experience. The connectedness and interconnectedness is successfully established, but the human dimension that can matter most in the success of teaching and learning is missing (Miller, 2014).

A discrepancy in digital technology, however, is due to a number of factors, like the generation divide as the young and the old vary in their attitudes and skills (Comba, 2011); the digital literacy divide, where accessibility to IT technology is often a question of being rich or poor; acceleration of technologies, whereby new developments might overwrite previous versions (TeachThought, 2013); and differences in learning attitudes, which include the (lack of) individual affinity for self-study (Hofstede, 1986). Nevertheless, the demand and need for virtual mobility in education continues to exist for both faculty and students.

What we see from the changing landscape of education in terms of needs and requirements, we have to admit that the preparedness of particular countries and of particular institutions to meet these newly emerging demands shows a very diverse state. Education policy makers and education management professionals should work closely on raising awareness about the importance of addressing international education needs.

Having in mind the growing number of incoming foreign students to Hungary (partly due to the ERASMUS exchange programs and partly to the launch of the *Stipendium Hungaricum* scholarship scheme) we will examine the benefits of the latter in detail.

What are the benefits and challenges of traditional mobility?

Student mobility in the traditional sense is undeniably more costly than virtual mobility, but it has so many – often intangible – benefits that in the final stock-taking the advantages for the host-institution, the home-institution, the mobility student, and the host country largely outnumber the disadvantages.

The benefits for the host-institution are manifold: it can address internationalization requirements set out by educational policy makers, for which technical and budget support can be claimed; it can provide diversity in thinking, life-styles, skills, and know-how; its staff can learn by and profit from synergy; it can create and offer an international context to all its students and faculty – foreign and domestic alike; and finally internationalization itself has a self-perpetuating effect in the sense that the more international the institution, the more attractive it is for international students.

The benefits for the home-institution – apart from the economic gain of having fewer students on site during the absence of their outgoing students – arise mainly from the fact that upon return of the outgoing students they get back young people enriched by knowledge, language skills and intercultural experience. These interculturally trained and experienced young people exercise a multiplicatory influence on the student-community back home: they are able to share and promote intercultural knowledge, skills and competences that might help their peers to adapt better to international requirements. Their examples serve as "good practice" to the others.

The benefits for the individual student are also numerous: mobility students have a chance not only to gain "foreign-country experience" but also to improve their communication skills and to be exposed to intercultural experience. They will possibly acquire new skills and know-how through experience working in international teams or reaching interculturally-appropriate solutions while working on problem-solving tasks and even improve their language skills. The international environment might beneficially stimulate their entrepreneurial spirit, flexibility and creativity.

Finally, the benefits for the host country can be counted on a larger scale: to disseminate the local culture; to get economic gains (fees in case of paying students + students as consumers); political capital gain (to raise "bridge-people" who act as "ambassadors" between the countries involved); and finally look at foreign students presence as an opportunity for country-branding (future investment carriers, etc.).

The successful management and handling of multiculturalism in educational settings poses challenges both to those who wish to enter a given country and to those who receive people with diverse cultural backgrounds in their country (Malota, 2015). The greater the cultural distance (i.e. the national, ethnic, religious and linguistic distance) between the receiving institutions or community and the incoming students, the more likely it is that challenges will be present in increasingly marked ways and that they will constitute a source of conflict.

For the students in mobility, it is assumed that a great amount of the difficulty arises not so much from the difference of language but rather from the difference of interaction by that language and through that language. Note that it is not only the difference and/or difficulty of the "language" in the Saussurean sense that presents a problem, but also the process of acquisition and the difference in language usage ("parole") that also contributes to the extraordinary efforts that are to be taken by learners (Kasper and Rose, 2002; Hidasi, 2003; Devlin, 2015).

Challenges in the educational domain derive from differences in academic culture, in classroom interaction, in teaching and learning methods, in communication styles and in academic administrative culture. Students must be aware of the respective importance in the host environment regarding performance or process; achievement or critical thinking; written achievements or oral discussions. If students are not familiar with the values of the host-community, they risk irritating their hosts. For example, they may be expected to watch or instead to be an active part of the process, to stay silent and listen rather than ask questions. These expectations regarding student behavior vary according to cultural heritage, just as much as the expectations and behavior of the teacher, who might see students as co-operators or as an audience, behaving as a "coach" or as an instructor.

The methods of teaching and learning are both affected by culture. In the 1970s, Henry (1976) listed 55 teaching methods, the number of which must have considerably grown since then. The greatest divide though exists between the so-called receptive methods and proactive methods. Whereas receptive methods put emphasis on observing, watching, imitating, repeating, and memorizing, proactive methods require doing, problem solving, comparing, and discussing. While receptive methods are well represented in the arsenal of teaching and learning of several Asian or African cultures, the concept of the proactive method constitutes the base of the Western teachinglearning approach. The former focuses on the perception and consideration of the whole context (high-context culture) prior to understanding, the latter concentrates on the overt (mostly verbal) message (low-context culture) and expects a prompt reaction to it. The former is nearer to the defensive, the latter is nearer to the offensive type of communication behaviour (Hidasi, 2003). Students might behave very differently from what is considered to be the norm in the host country but an often-neglected aspect of the difficulties might be attributed to the cultural differences in communication strategies of the teaching and of the learning side. It is hypothesized that there is a strong interdependence of communication strategies and of teaching/learning strategies (Hofstede, 1986; DeKeyser, 2003; Jin and Cortazzi, 2013) – both acquired in childhood as part of the home country culture. Raising teachers` awareness about differences between communication styles and language behavior might help avoid misunderstandings and stereotyping (Hidasi, 2014).

Finally, one of the greatest challenges for the host and home country institutions is to be aware of the differences in the role and operation of the academic administration. The role of the academic unit and administrative staff in providing service to students must be defined and is often one of two polar solutions: to serve students, that is to "find and provide" accommodation for them or to coach, that is to offer "support for the student" in finding accommodation, among other basic needs.

These questions are interrelated and interconnected with each other through the common denominator designated as "cultural-mental programming" (Hofstede, 1986). As stated by Powell and Andersen (1994: 322), "culture provides us with a heritage and a set of expectations about educational settings" such that, when these expectations concerning the whole educational process itself are not met, those affected become disappointed or frustrated. Although this disorientation comes from a feeling of loss, which gives rise to the question, "Why not do it the way we always have?", the reality is that ways that function well in one particular setting might prove less effective

in a different setting. Awareness should be raised with respect to the ways in which people's worldviews affect their learning, understanding, production, and interaction. Neglecting differences in mental programming – and for that matter in communication – might lead to low effectiveness. A better understanding of the differences might also help to avoid frustrations arising from misunderstandings on either side. The issues connected with foreign language acquisition and communication are gaining importance within the process of internationalization and globalization. Still, we are left with the question of discovering the most effective ways and means of mental programming and reprogramming.

Conclusions

In the context of globalization the relevance of the topics discussed is reinforced by the need to adapt to changes within the ever-intensifying shift from intercultural to multicultural environment in education, in communities, in business and in work places. We can agree that while the need for real as opposed to virtual or online intercultural experience remains, and has to be satisfied, it has to be acknowledged that understanding of interculturality deepens through "real-life" experiences (Ricks, 2010).

Institutions should be prepared for the acceptance of a growing number of other-cultural input: in human terms, in cultural terms, in language terms and in terms of customs and habits as well as "civilization" terms. Given that it is no longer enough to observe and acknowledge cultural differences, interculturality must be handled and managed. Efforts are to be mobilized on both sides: on the side of the students and also on the side of the host-institutions. Students have to make efforts of assimilation to a certain extent: the new environment cannot be expected to accommodate all individual needs separately. Hence a mental reprogramming of expectations and behavior is a successful path towards smooth adaptation to the host requirements. The host institution for its part should make efforts to enhance intercultural sensitivity and culture-specific comprehension among its academic staff, faculty and administration as well as among the community members.

Living and working in a multicultural environment, we should make the utmost of it by coming to a synergy within the wealth of talent and of human capital.

References

Barabási, A. L. (2002): Linked: The New Science of Networks. Perseus: Cambridge, MA.

Barabási, A. L. (2010): Bursts. Dutton: New York, NY.

Bar-Hillel, Y. (1951). The present state of research on mechanical translation. *American Documentation*. 2/4. 229-237.

Comba V. (2011): Net generation and digital literacy: a short bibliographical review and some remarks. *Journal of e-Learning and Knowledge Society*, 7/1, English Edition, 59-66.

DeKeyser, R. M. (2003): Implicit and explicit learning. In: Doughty, C. and Long, M. (eds.). *The Handbook of Second Language Acquisition*. 313–348. Blackwell: Oxford.

Devlin, K. (2015): Learning a foreign language a 'must' in Europe, not so in America. www.pewresearch.org/fact-tank/2015/07/13/learning-a-foreign-language-a-must-in-europe-not-so-in-america

Falkné Bánó, K. (2001): *Kultúraközi kommunikáció* [*Intercultural Communication*]. Püski Kiadó: Budapest

Fallon, J. (2013): Education Is a Global Industry Which the UK Is in Prime Position to Lead. www.huffingtonpost.co.uk/john-fallon/uk-education_b_3681166.html

- Földes, C. (2007): "Interkulturális kommunikáció": koncepciók, módszerek, kérdőjelek ["Intercultural communication": concepts, methods and question-marks]. *Fordítástudomány*. 9/1. 14-39.
- Hidasi, J. (2003): On the capacity to communicate in intercultural settings: Reflections on Japanese communication strategies. *Human Communication Studies*, 31. 81-90.
- Hidasi, J. (2008a): *Interkulturális Kommunikáció* [*Intercultural Communication*]. (2nd ed.) Scolar: Budapest.
- Hidasi, J. (2008b): Közeledés vagy távolodás? Globalizáció és multikulturalizmus az Európai Unióban [Convergence or Divergence? Globalization and Multiculturalism within the EU]. In: Nádor, O. (ed.). A magyar mint európai és világnyelv: A XVIII. Magyar Alkalmazott Nyelvészeti Kongresszus előadásai [Hungarian as a European and World Language: Proceedings of the 18th Congress of Hungarian Applied Linguistics]. 5/1, 301-304. Budapest: Balassi Intézet.
- Hidasi, J. (2011): Mobilitás és migráció [Mobilty and Migration]. In: Nyusztay L., (ed.) Tanulmányok a nemzetközi migráció köréből [Studies on International Migration]. 44-55. Perfekt: Budapest.
- Hidasi, J. (2014): Cross-cultural dimensions of foreign language learning and teaching. *Proceedings of the Conference of the (AJE) Association of Japanese Language Teachers in Europe.* http://www.eaje.eu/media/0/myfiles/2024.pdf
- Henry, J. (1976): A cross-cultural outline of education. In: Roberts, J. and Adinsanya, S. (eds.): *Educational Patterns and Cultural Configurations*. 34-63. David McKey: New York.
- Hofstede, G. (1986): Cultural differences in teaching and learning. *International Journal of Intercultural Relations*. 10. 301-320.
- Jin, L. and Cortazzi, M. (eds.) (2013): Researching Cultures of Learning: International Perspectives on Language Learning and Education. Palgrave Macmillan: London.
- Karinthy, F. (1929): Minden másképpen van [Everything is different]. Athenaeum: Budapest.
- Kasper, G. and Rose, K. (2002): Pragmatic Development in a Second Language. Wiley: New York.
- Kramsch, C. (1993): Context and culture in language teaching. Oxford University Press: Oxford.
- Lewis, R. (2001): *The Cultural Imperative: Global Trends in the 21st Century*. Intercultural Press: Yarmouth, ME:
- Malota, E. (2015): Egyetemi munkatársak interkulturális készségeinek fejlesztése Módszertani segédlet. Nemzetkoziesites a gyakorlatban. Tempus Közalapitvany: Budapest. http://www.tka.hu/docs/palyazatok/chs_handout_04_interkulti-keszsegekfejlesztese_(1).pdf
- Miller, A. (2014): 4 Lessons We Can Learn from the "Failure" of MOOCs. *Edutopia*, 2014, January 30. www.edutopia.org/blog/4-lessons-from-failure-of-moocs-andrew-miller
- Newman, M.; Watts, D. and Barabási, A. L. (2006): *The Structure and Dynamics of Networks*. Princeton University Press: Princeton, NJ.
- Pappano, L. (2012): The year of the MOOC. The New York Times, 4. November 2012, ED26.
- Powell, R. G. and Andersen, J. (1994): Culture and classroom communication. In: Samovar, L. A. and Porter, R. E. (eds.) *Intercultural Communication, a Reader* (7th ed.). Wadsworth: Belmont, CA.
- Ricks, Th. E. (2010). Some side benefits of learning both a foreign language and a foreign culture. Foreign Policy, http://foreignpolicy.com/2010/12/16/some-side-benefits-of-learning-both-a-foreign-language-and-a-foreign-culture/
- State of the MOOC (2016): A Year of Massive Landscape Change For Massive Open Online Courses www.onlinecoursereport.com/state-of-the-mooc-2016-a-year-of-massive-landscape-change-for-massive-open-online-courses/
- TeachThought Staff, (2013): 15 Examples of new technology in education. www.teachthought.com/the-future-of-learning/technology/15-examples-of-new-technology/