En Sumer Singh y Kerim Karadal, *Proceedings Book*. Estambul (Turquía): CEO Congress.

# Knowledge Mobilization in Argentine Universities. Towards a Platform.

Quiroga, Sergio Ricardo.

Cita:

Quiroga, Sergio Ricardo (2024). *Knowledge Mobilization in Argentine Universities. Towards a Platform. En Sumer Singh y Kerim Karadal Proceedings Book. Estambul (Turquía): CEO Congress.* 

Dirección estable: https://www.aacademica.org/sergio.ricardo.quiroga/247

ARK: https://n2t.net/ark:/13683/pgPS/S8P



Esta obra está bajo una licencia de Creative Commons. Para ver una copia de esta licencia, visite https://creativecommons.org/licenses/by-nc-nd/4.0/deed.es.

Acta Académica es un proyecto académico sin fines de lucro enmarcado en la iniciativa de acceso abierto. Acta Académica fue creado para facilitar a investigadores de todo el mundo el compartir su producción académica. Para crear un perfil gratuitamente o acceder a otros trabajos visite: https://www.aacademica.org.

# EDITORS Prof.Dr.Sumer Singh YADAV and Kerim KARADAL www.ceocongress.org 10 CEO Congress ISBN: 978-625-95075-3-8 - PROCEEDINGS BOOK. Pages 26-34

# Knowledge Mobilization in Argentine Universities. Towards a Platform.

Lecturer Sergio Quiroga ICAES, Argentina sergioricardoquiroga@gmail.com Orcid: 0000-0002-3891-8429

# Introduction

The Research and Humanities Research Council of Canada (SSHRC) defines the mobilization of knowledge as "a general term that covers a wide range of activities related to the production and use of research results, including synthesis, diffusion, transfer, transfer, exchange and co-creation or co-production of knowledge by researchers and knowledge users. Effective knowledge mobilization includes plans to publish data, when appropriate" (SSHRC, 2017).

The concept of knowledge mobilization refers to the various ways in which more solid connections between research, policies and practice can be established (Levin, 2008). The mobilization of knowledge results in a catalyst in the knowledge intermediation system, among multiple actors to transform the findings and products of a researcher into the practice of a user. The objective is to use an understandable and clear language and an accessible format to present scientific-technical information, that "… help academic research be accessible to non-academic audiences and support collaborations between academic and non-academic partners, such as community organizations" (Phipps 2016, Usmani and Alamgir, 2020).

This field of study is of growing interest not only in education, but also in all areas of social policy. Governments, universities, school systems and other actors globally must find new ways to share, understand and apply knowledge derived from research. In recent years, the understanding of the mobilization of knowledge has evolved, considering different theoretical and conceptual perspectives. The main issues and challenges when conducting empirical research in the field, include methodologies and approaches to study the effectiveness of knowledge derived from formal research, which uses systematic and accepted processes to generate data and conclusions. However, it is recognized that this is not the only type of knowledge that influences politics and educational practice.

The mobilization of knowledge is addressed from different perspectives in the literature: from its application as a basis for decision making in public policies, to the translation of research results in concrete actions. This process also includes efforts to share these results with possible users or implement actions that prepare knowledge for their effective use, facilitated through intermediaries.

One of the central issues in this area is: who is the investigation for? This question is essential to define the investigation agendas, the evaluation criteria and the relevance of the results.



The investigation does not occur in isolation; It involves external actors and is oriented towards the solution of specific social and educational problems.

There are several ways to understand the mobilization of knowledge:

 $\Box$  A form is in the use of evidence in public policies, where research can offer data and analysis that support political decisions (Nutley et al., 2007).

 $\Box$  The translation of results in action, beyond the theoretical field, the results of the research can become practical tools (Bennet et al., 2007).

 $\Box$  The dissemination of results, a approach that prioritizes the dissemination of the findings towards actors that can use them, as teachers, administrators or responsible for educational policies (Levin, 2011).

 $\Box$  The preparation of knowledge for practical use, since it could be distributed among actors capable of intervening directly in the problems identified (Levesque, 2009).

The concept of knowledge mobilization does not have a single definition, but different perspectives and definitions (Najdorf and Alonso, 2014), as the use of the evidence and the result of research for decision making in public policies (Nutley, 2003), a method or tool that facilitates the translation of research results to action (Bennet, 2007), efforts to share research results with other users (Levin, 2011) and actions that allow to leave knowledge ready for action and his intervention through interlocutors (Najdor and Alonso, 2014).

# Present challenges

The challenges of the mobilization of science are exposed in the lack of knowledge and understanding of the higher education institutions of the main concepts that make up the mobilization of knowledge. It is a new awareness of the construction of the investigation, a way that has the recipients as active actors.

Given ignorance, it is difficult to find institutional strategies in universities where there are not even institutional public communication strategies. Scientific communicators and researchers in affordable language can communicate their achievements and advances in research processes, however, that would be an additional task of teachers-researchers of Argentine universities who already have a work overload.

Universities face several difficulties by designing public communication strategies of science. First, the lack of financial and human resources, expressed in the absence of professionals specialized in science communication, such as scientific communicators, specialized journalists and educators who limit the ability to design and execute effective strategies. In the Argentine context, universities are not perceived as organizations that build science by citizenship, according to the Public Perception Survey of Science 2021. In addition, there is the ignorance of the audiences to which the university is directed with its communications, since the audiences can be very varied, from students and academics to the general public and the media and the access and understanding of scientific messages given the complexity of research issues. Make the scientific issues relevant and contextual for the general public requires a deep understanding of both scientific content and the concerns and interests of the public.

Researchers often prioritize the publication in specialized magazines with a particular jargon for a specialized audience and the communication of science established institutionally, it is not an idea that precisely falls in love with university managers. The social communication of science is not always valued or recognized within the academy, which discourages researchers to participate in dissemination activities, in addition to not possibly having communication training and may not feel comfortable or trained to find out with the public



not specialized. cientific communication is often not integrated from the beginning in research projects, which can lead to less effective and planned dissemination. Promoting collaboration between scientists and communicators is not always easy, and there could be cultural and disciplinary barriers.

Deciding between using traditional media (such as written press and television) and digital media (social networks, blogs, podcasts) is a complex task for specialists. The management of social networks and other digital platforms requires specific knowledge and a coherent strategy to be effective. Establishing clear indicators and methods to measure the impact of scientific communication strategies is essential, but often difficult to implement. Obtaining and using public feedback to improve communication strategies can be a complex and continuous process. On the other hand, the lack of institutional support and clear policies that promote public communication of science is a clear limiting to initiatives in this area.

Argentine universities face a series of difficulties and challenges when trying to develop and maintain effective knowledge mobilization strategies. These challenges can be categorized in several key areas. Argentine universities often operate with tight budgets, which makes investment in specific knowledge mobilization programs difficult and have large dependence on public funds that can be insufficient or unstable affects the ability to plan and execute long -term strategies. There is a shortage of professionals specialized in technology transfer, scientific communication and knowledge management and the training of academic and administrative staff in knowledge mobilization practices is limited.

Academic production is often measured in terms of scientific publications and obtaining research funds, leaving in the background the mobilization of knowledge and knowledge transfer and mobilization activities are not always recognized or valued within the academic system, which can discourage researchers. On the other hand, cultural and disciplinary differences can hinder collaboration between researchers from different fields and Between scientists and communicators and traditional hierarchical structures can prevent fluid and collaborative communication between departments and faculties.

The lack of adequate technological infrastructure can hinder the implementation of platforms and tools for the transfer of knowledge and inequality in access to technological resources between different universities and regions is also a problem. The absence of integrated platforms for the management and dissemination of knowledge limits the ability to share information efficiently. Many universities have a limited link with the industry, which reduces opportunities for the transfer of practical and applicable knowledge and the lack of incentives for both researchers and companies difficult to create strategic alliances and effective collaborations. Aligning academic research with social and community needs and demands is a constant challenge that would allow the community to involve the research and transfer process is a complex process due to differences in challenges, expectations and objectives.

The absence of clear and coherent policies at the institutional level on knowledge mobilization can generate ambiguities and lack of direction where bureaucracy and administrative processes slow down and complicate knowledge transfer initiatives. Differences in language and terminology used by academics and other actors (industry, community, government) can hinder effective communication and lack of access to mass communication platforms limits the capacity to disseminate knowledge to a broader audience. The lack of an integrated and strategic approach to the communication-movement of knowledge reduces the potential impact of mobilization initiatives.

To overcome these challenges, it is essential that Argentine universities must invest in specialized resources and training, promote an institutional culture that assess knowledge



mobilization. Develop adequate technological infrastructure. Strengthen the link with the productive sector and the community, establish clear and coherent policies and regulations.

In addition, of adequate financing and resources problems in Argentine universities, a fact that makes it difficult to implement any initial project. Also, the fact that the actors involved often lack the necessary skills to mobilize knowledge effectively and the disconnection between mission and practice since there is an incoherence between the mission statements of the research organizations on the mobilization of knowledge and their real practices. To meet needs, it is essential to develop capacities through training and continuous support to individuals and organizations and initiatives adapted to specific contexts are required, especially in developing countries, to address their challenges.

The Universidad Nacional de San Luis was created in 1973 and has a rich historical legacy, whose emergency point dates back to 1939 with the foundation of the Universidad Nacional de Cuyo. In the Argentine University System, the UNSL is a medium university located in the center of the country, in the capital of the province of San Luis. During the democratic stage in Argentina initiated in December 1983 to date the National University of San Luis (UNSL) begins to travel different stages of growth, development and projection in different areas of knowledge, the development of research and extension to the social environment local, regional and Latin American.

#### On the way to a strategy

To build a university strategy for the mobilization of knowledge in the field of social sciences, it is essential proper and socially used. The creation of a knowledge mobilization strategy must offer a conceptual framework that connects knowledge production with its social application, which is essential to design effective strategies.

As for the knowledge circuits we can establish two types of circuits: that of acts of use (where knowledge is used in society) and that of usable research acts (which may or may not be applied immediately). These circuits illustrate how knowledge can be potentially useful to being effectively applied in social contexts, for which it is essential to design mobilization strategies that facilitate this transit.

#### The non -academic actor

The figure of the extra -academic agent, which is not only a passive recipient of knowledge, but an active interlocutor in the mobilization of knowledge. This figure forces to think about new dynamics and resources to legitimize and authorize knowledge, creating a framework for the development of mobilization strategies that must consider these actors as partners in the process of implementation of knowledge. This means, at least in the Latin American context, in a new way of conceiving social research and the way it occurs.

The social utility of knowledge is established in relation to the validation by non -academic agents, which suggests that a mobilization strategy should seek this validation and work closely with those interested to ensure that knowledge is relevant and applicable in their contexts

Although we recognize traditional modes of production, we must now talk about plurality of the modes of knowledge production. Social scientists and their organizations have the need for a more inclusive and flexible approach, which combines both traditional and social -utility oriented. This "amphibian" approach, as Maristella Svampa, the argentine writer calls it, is crucial for a mobilization strategy that is not limited to a single paradigm, but can operate in multiple spaces (academic and non -academic).



The inclusion of non -academic agents implies a transformation in the dynamics of knowledge production, where new trans -epistemic resources are required. This implies that knowledge mobilization strategies must be flexible and adapt to these new interactions, facilitating the creation of collaborative networks between academics and social actors.

Knowledge production organizations and social scientists must advance in a deeper understanding of the processes and actors involved in the mobilization of knowledge, highlighting the need for collaboration with non -academic agents, external validation of knowledge, and the ability to operate in multiple Knowledge production systems.

# Key objectives and actors

In this context, the transfer of knowledge is not limited to the traditional idea of technological transfer, but must be adapted to cover social transfer, a concept that implies the collaboration and exchange between social scientists and the actors of society (extraction agents) that will participate in the use of the results. Meanwhile, knowledge mobilization refers to strategies that allow generated knowledge to be used effectively. This includes active interaction between knowledge producers (universities, researchers) and users (Government, NGOs, community), thus facilitating a dynamic dialogue that leads to the co-construction of problems and solutions.

# Elements of knowledge mobilization

In order for mobilization to be effective, the university must implement a series of practical actions, such as the creation of collaboration networks with users of knowledge, such as local governments, NGOs and companies, the promotion of problems construction, allowing social actors participate from the beginning in the definition of the problems to be investigated, the translation of knowledge generated by the social sciences in an accessible and usable format by those who need to apply that knowledge (for example, in public policies or social programs) and the recognition of interlocutors Key, that is to say, such as the Knowledge Brokers or Knowledge Intermediaries, who are responsible for facilitating the adaptation and application of knowledge to practical contexts, are crucial in this process.

# Production modes with knowledge

There are two types of knowledge production in social sciences: accumulation is oriented to the production of theoretical and fundamental knowledge, based on academic curiosity, meanwhile, transformation is a process that implies adapting the knowledge generated to respond to specific needs of defined users, as social actors, and is essentially new knowledge production by translating and applying the results to specific contexts. It is vital to include these agents in the investigation process to ensure that the results are applicable and useful in real contexts in a context of challenges and tensions. There is a tension between producing knowledge of high academic quality and making it socially relevant and the challenges are recurring in academic evaluation, which often prioritizes scientific excellence over social relevance. To address this, indicators and metrics must be developed that recognize and value the link between researchers and their social environment, allowing to measure the social impact of social science research.

# Ideas for the implementation of the strategy

The operation of a knowledge mobilization office within the university that works as an intermediary between researchers and knowledge users, promoting constant interaction and monitoring of joint projects is useful. In line with this idea, training could be offered both



researchers and intermediaries in communication, cooking and knowledge adaptation, in addition to encouraging projects that actively seek to generate knowledge that can be transferred and applied in the resolution of social problems. A university strategy for the mobilization of knowledge in social sciences must focus on the creation of collaborative networks, problem co-construction, translation and transformation of knowledge, and mediation between researchers and social actors. The university, through the creation of formal structures and the promotion of research -oriented research, can promote greater link between academic knowledge and social needs.

Towards the mobilization of knowledge in Argentine universities as a strategy

In the 21st century, university's purposes and purposes in contemporary societies have evolved to adapt to global changes and challenges. Universities generate and promote beneficial knowledge for society. The new findings that occur through scientific, technological, humanistic and artistic research make special and paradigmatic organizations. That knowledge that emerges through teaching, the production of national science, and the connection with its local communities through extension are characteristics that make these organizations unique.

Through the scientific publications and the role of researchers in them, scientific production is deployed to academic communities. In addition, universities prepare professionals for the labor market and encourage the development of critical, ethical and social competences.

One of the most relevant tasks of the University is the promotion of research understood as the constant search for solutions for social, economic and environmental problems. A synergy between universities and government is essential for social development.

Through the concept of technological transfer, today in crisis, universities facilitate innovation, new products and knowledge through collaboration with industries, governments and other institutions. These organizations contribute to the economic and social development of communities and can (must) participate in them as an outstanding actor in a multiplicity of issues such as public health, education, economy, environmental sustainability and community development, for example.

However, the ideas that understand the mobilization of knowledge gives new practices within the research groups, understanding research, not only as an individual, but group activity.

The mobilization of knowledge is called to constitute a relevant function in universities, although experiences in universities are scarce. It is necessary to develop social mobilization strategies, where users intervene as ultimate actor, for the improvement of the quality of life of societies and the solution of social problems. This cannot be done by appealing to the goodwill of the researchers. Substantive organizational strategies and hierarchies are required in the breasts of the faculties of social and human sciences.

Universities are committed to the promotion of critical thinking, reflection and Debate on contemporary issues and the defense of academic freedom as a fundamental principle for the advancement of knowledge and society. In response to the winds of globalization, universities have generally adopted with different emphasis and efforts to internationalization of higher education. Without a doubt, they must promote networks and associations to promote internationalization and global collaboration. International academic exchange and the search for diverse teaching and student experiences are essential, in the preparation of graduates who are global citizens, with conscience in intercultural understanding, the development of soft skills such as communication, teamwork and resolution of problems and the preparation of students to adapt to a constant and highly technological work environment.



In recent years, universities have expanded access to higher education for underrepresented and disadvantaged groups and have implemented policies and programs that promote inclusion and equity. In addition, they can be active in the knowledge economy through the creation of Spin-Offs, Startups and the transfer of technology and increase in the local context, their collaboration with the business sector for the development of innovative products and services. Universities in the 21st century have a multifaceted role that goes beyond the mere transmission of knowledge. They are called to be agents of social, economic and cultural change, actively contributing to the welfare and progress of society.

# Knowledge mobilization platform for a university.

Given the lack of strategies regarding the mobilization of knowledge in the social and human sciences we offer some simple ideas that could form a work agenda in the construction of KM processes. Among them, is the idea of having a platform. Without a doubt, to develop a knowledge mobilization platform in an Argentine university, it would be essential to integrate several elements that facilitate the creation, exchange, and application of knowledge inside and outside the academic community. A possible plan to build can start from the idea of a scheme that raises an open access portal with a digital repository, presence of multimedia files and open licenses. In addition, it would be productive to have a database of researchers and projects with detailed information, research areas, projects of projects and publications, collaboration and networks, knowledge and resources management, and link with the productive sector and society.

# Open access portal

An open access portal is a digital repository where academic publications, thesis, magazine articles, and other research works produced by the university is stored and accessed. It also has multimedia files, conferences videos, seminars, and workshops for visualization and open licenses such as Creative Commons to facilitate the reuse and distribution of content.

# Researcher and Project Database

A database with researchers' profiles is very useful where there is detailed information about researchers, their specialization areas, publications and projects ongoing and that has a catalog of projects and their description with details about objectives, methodology, financing, financing and expected results.

# A collaboration and networks

A platform formed with forums and discussion groups. It is about having virtual spaces for thematic discussion and collaboration between researchers, students and external experts. In addition, having collaboration networks that facilitate the training of associations between researchers from different institutions and sectors.

# Knowledge and resources management

It is necessary to have project management tools such as different software for planning, monitoring and management of research projects and training materials, manuals and guides on good practices in research and knowledge mobilization.

Interface of linking with the productive sector and society



The linking interface can materialize in a linking portal, understood as a space to connect the university with companies, non -governmental organizations and government entities and catalog of services and knowledge available for technological transfer and advice.

# Training and Professional Development

Permanent professional development must be given with online training programs on topics related to research and knowledge transfer and certification programs for researchers and professionals interested in knowledge mobilization.

#### form of communication

Integrated by newsletters and Newsletters with periodic updates on research, events and relevant news and integration with social networks for the dissemination and promotion of university achievements and activities. This means that communication is at the service of an institutional strategy and not in the mere individual effort of a researcher as proposed with the "Transmedia Approach" Anderson and McLachlan (2016). In addition, the regular publication of articles and podcasts on topics of interest and advances in research is necessary.

# Evaluation and feedback

It is necessary to have evaluation systems, that is, those tools to evaluate the impact and effectiveness of the projects and activities of knowledge mobilization with spaces to receive comments and suggestions from the university community and external partners.

#### Multilingual interface

Access in several languages facilitates access to information and resources in multiple languages to expand scope and inclusion.

# Integration with external platforms

It is the connection with international databases. Integration with repositories and databases of other institutions and research agencies, promoting international collaboration and facilitating participation in international research networks and projects.

These hypothetical elements would form a new and robust strategy of mobilization of knowledge, which not only encourages the creation and exchange of knowledge within the university, but also facilitates its practical application for the benefit of society and the economy.

# The contribution of citizenship

Citizens can contribute significantly on a university platform for the mobilization of knowledge in several ways, including collaboration in research projects with participation in surveys and studies, and sharing personal data and experiences that may be useful for research, volunteering and volunteering and mentoring with the promotion of volunteers for community or research projects, and mentors for students, providing guidance and support in areas of experience. Participation in workshops, seminars and conferences organized by the University and the proposition of topics and content for future events. Participation in the writing of blogs on topics of interest, relevant to the university community and participation in discussion forums and working groups. Innovation and constant entrepreneurship with the presentation of ideas and projects that can be developed in collaboration between the university and the participation in business incubators and innovation centers. Access to financial support and resources with the donation of funds or material resources for specific



projects and access to facilities and equipment necessary for research. These and other actions that can generate in the same direction, not only help the university to fulfill their mission of generation and dissemination of knowledge, but also strengthen the relationship between the institution and the community, promoting a mutual learning environment and benefit shared.

#### References

Anderson, C. R., & Mclaclan, S. M. (2016). Transformative Research as Knowledge Mobilization: Transmedia, Bridges, and Layers. Action Research, 14 (3), 295-317. Available at https://doi.org/10.1177/1476750315616684

Badillo, á. and Marenghi, P. (2001). From media democracy to electronic democracy. CIC. Information and Communication Notebooks, No. 6, 39-61.

Bennet, A., Bennet, D. Fafard, K., Fonda, M., Lomond, T., Messier, L., Vaugeois, N., (2007). Knowledge Mobilization in the Social Sciences and Humanities. Frost, WV: MQI Press.

Bennet, Alex, David Bennet, Katherine Fafard, Marc Fonda, Ted Lomond, Laurent Messier, and Vaugeois, Nicole (2007). Knowledge Mobilization in the Social Sciences and Humanities. Frost, WV: MQI Press.

Briceño-Romero, Y. & Bravo Bautista, L. (2022). Social mobilization in digital environments: a review of scientific production in Spanish in the 21st century. Political reflection 24 (49), pp. 6-20. DOI: https://doi.org/10.29375/01240781.4374

Briceño-Romero, Ysabel (2014). Know and media: towards an emerging mode of the communication of science. Bitácora-e Latin American Electronic Journal of Social, Historical and Cultural Studies of Science and Technology, No. 1, 3 34. SNN2244-700. Available in http://www.saber.ula.ve/handle/123456789/38746

Callon, Michel (ed.) (1998). The laws of markets. "" (The Laws of the Markets) ". London: Blackwell Publishers.

Davies, H., and S. Nutley (2008). Learning More About How Research-Based Knowledge Gets USED: Guidance in the Development of New Empirical Research. New York: William T. Grant Foundation. Education, No. 9, Vol. 1, pp. 15-26. "For Undertaking the Evidence-Practice Agenda", in Evaluation, 9 (2), 125-148.

Freeman, C. (2008). Systems of Innovation: Selected Essays in Evolutionary Economics, Edward Elgar Publishing Ltd.

Golhasany, H., Harvey, B. Capacity Development for Knowledge Mobilization: A Scoping Review of the Concepts and Practices. Humanit Soc Sci Commun 10, 235 (2023). https://doi.org/10.1057/s41599-023-01733-8

Janasoff, S. (2004). State of Knowledge: The Co-Production of Science and Social Order. Taylor & Francis.

Jenkins, H. (2009). The Revenge of the Origami Unicorn: seven principles of transmedia narration. Available in http://henryjenkins.org/blog/2009/12/the\_revenge\_of\_the\_origami\_uni.html

Jenkins, H., for D, S. & Green, J. (2015). Transmedia culture: the creation of content and value in a network culture. Barcelona: Gedisa.

Krugman, P. (2000). The globalization of the economy and financial crises. Editorial Fundación Pedro Barié de la Maza.

Latour, B. (1992). Science in Action: How to follow scientists and engineers through society, Editorial Labor, Barcelona.

Mild, Pierre. (2009). Knowledge Mobilization Works. www. knowledgemobilication.net

Levin, B. (2008). Knowledge for Action in Education Research and Policy: What We Know, What We Don't Know and What We Need To Do. In Wissen Fur Handeln - Forschungsstrarategien Fur eeine Evidenzbasierte Bildungspolitik, 35–44. Bonn: Bundesministerium for Forschung

Levin, B. (2011). Mobilming Research Knowledge in Education. London Review of Education, No. 9, Vol. 1, pp. 15-26.

Lundvall, Bengt-Ma. (2002). Innovation Growth and Social Cohesion, Edward Elgar, London.

McLuhan, M. (1962). The Gutenberg Galaxy: The Making of Typographic Man. Toronto: University of Toronto Press.



Naidorf, J., & Alonso, M. (2018). The mobilization of knowledge in three times. Lusophone Magazine of Educação, (39), 81-95. Available in https://doi.org/10.24140/issn.1645-7250.rle39.06.

Nelson RR, Winter SG (1982) An Evolutionary Theory of Economic Change. Mass: Belknap Press of Harvard University Press, Cambridge

Nowotny, Helga; Scott, Peter; Gibbons, Michael (2001). Re-Thinking Science: Knowledge and the public in an age of uncrtaincy. Cambridge, UK: Polity.

Nutley, S., Walter, I., & Davies, H. T. (2003) "From Knowing To Doing A Framework

Pérez Lindo, A. (2016). Mode 3 of knowledge production, universities and intelligent development of South America. Integration and knowledge, 5 (2). https://doi.org/10.61203/2347-0658.v5.n2.15727

Phipps, D., Cummgs, J., Peller, D., Craigh, W., & Cardinal, S. (2016). The co-produced Pathway to impact describes Knowledge Mobilization Process. Journal of Community Engagement and Scholarship, 09 (01), 31–40.

Quiroga, S. (2020). Public Awareness of Knowledge. International Journal of Global Science Research (Online) Vol. 7, ISSUE. 2, October, pp. 1321-1332 DOI: 10.26540/IJGSR.V7.I2.2020.154. Available in http://www.ijgsr.com

Quiroga, S. (2022). Science, communication and action. Synergies Spanish Academic Editorial. P. 1-113.

Robertson R. (1992). Globalization: Social Theory and Global Culture. London: Sage.

Scolari, C. (2012). Transmedia narratives, audiovisual convergence and new communication strategies. CAC quaderns. http://www.cac.cat/pfw\_#les/cma/recerca/quaderns\_cac/q38\_scolari\_et\_al\_es.pdf

Scolari, C. (2013). Transmedia narratives. When all media tell. Barcelona: Deusto.

Scolari, C. (2014). Don Quixote of La Mancha: Transmedia Storytelling in the Gray Zone. International Journal of Communication, 8, 2382-2405.

Social Sciences and Humanities Research Council. Canada Government. Knowledge Mobilization. Available at https://www.sshrc-crsh.gc.ca/home-accueil-eg.aspx

Usmani, S. & Alamgir, A.K.M. (2020). Knowledge Translation, Knowledge Mobilization, or Knowledge Transfer-Are They Synonymous in Canadian Context? [Blog]. Access Alliance: Toronto. Available at https://acortar.link/65kpfc

Van Dijk, J. (2000). Models of Democracy and Concepts of Communication. In: Hacker, K.L.; Van Dijk, J. (2000). Digital Democracy. London: Sage.

Wallerstein, I. (2004). Systems analysis: an introduction. Mexico: 21st century. In Spanish, 2005.

Wenger, Etienne (1987). Artificial Intelligence and Tutoring Systems: Computational and Cognitive Approaches to the Communication of Knowledge. Morgan Kaufmann Press.

Ziman, J. (1994). Prometheus Bound. Science in A Dynamic Steady State, Cambridge, UK, Cambridge University Press.