# The civically engaged university model in Colombia

Article in International Journal of Technology Management and Sustainable Development · April 2011  DOI: 10.1386/tmsd.9.3.161_1		
CITATIONS		READS
10		290
1 author:		
	Maria Alejandra Gonzalez-Perez Universidad EAFIT 134 PUBLICATIONS 1,181 CITATIONS  SEE PROFILE	
Some of the authors of this publication are also working on these related projects:		
Project	Sustainability View project	
	Columns (novindicals) Vious project	

International Journal of Technology Management & Sustainable Development Volume 9 Number 3

© Intellect Ltd 2010. Article. English language. doi: 10.1386/tmsd.9.3.161\_1

10 11 12

13

16

17

19

24

06

#### MARIA-ALEJANDRA GONZALEZ-PEREZ

Universidad EAFIT (Colombia)

# The civically engaged university model in Colombia

28

32

42 43

45

### **ABSTRACT**

The role that higher education institutions (HEIs) play in the communities to which they belong is a topic that has received attention from academics, policy-makers and HEI managers in recent years. This article provides a comprehensive outline in the area of community-university partnerships (CUPs). It focuses on the active engagement of universities in the communities they serve, their models of collaboration, the motivations behind them and the impact on the social, cultural and economic development of their localities as well as the challenges for the wider community and for the life of higher education. It summarizes the current situation in Colombia and presents examples of models of CUPs around the world.

**KEYWORDS** 

community-university partnerships (CUPs) Colombia civil engagement higher education institutions (HEIs) social responsibility

## INTRODUCTION

This article aims to provide an overview in the area of community–university partnerships (CUPs) and to describe the context for the civic engagement of universities with their respective surrounding communities in Colombia. The first part provides a comprehensive overview in the area of CUPs. The second section presents examples of models of CUPs around the world. The third part summarizes the current situation in Colombia in this area.

- In July 2007, the OECD published a literature review by Peter Arbo and Paul Benneworth on the contribution of higher education institutions to regional development. This report was commissioned by the OECD, and it is part of the project 'Supporting the Contribution of Higher Education Institutions to Regional Development' conducted by the OECD's Programme on Institutional Management in Higher Education (IMHE).
- 2 John Dewey (1859–1952) was a social thinker, considered one of the founders of pragmatism and the father of functionalist psychology.

The contribution of higher education institutions (HEIs), beyond their traditional activities of teaching and research, to their local communities is a topic that has received increasing attention from academics, policy-makers, public and private funding agencies, HEI managers and community practitioners in recent years at the international level. In particular, the ratification of the universities' third mission via the triple helix system that institutionally fosters cooperation for innovation between university–government–industry (Etzkowitz 2008) has been identified as a key driver of innovation and socio-economic development in the emerging economies (Saad, Zawdie and Malairaja 2008).

03

07

13

21

23

24

26

36

42

47

However, at the international level, the triple helix system has been challenged by a fourth helix: the public (Cooper 2009; Leydesdorff and Etzkowitz 2003). The introduction of a fourth helix implies that universities should assume an entrepreneurial role in this institutional framework (Etzkowitz 2008). This fourth helix has also been associated with public policies that explicitly see education as a crucial incubator of individual trust, civic participation and tolerance and which underpin relationships of reciprocity, strengthening social cohesion, employment and competitiveness in a global knowledge-based economy (Dearing 1997; EC 2001; OECD 2004). As a response to these policies, a growing number of university–community partnerships have been established around the world, and together with this, a large number of scholarly publications and grey documents have been produced dealing with the issue.

It is claimed that the university is next to the family and the Roman Catholic Church, as the oldest social institution in the western World. As such its role has historically been queried as a point of social interest and significance. There is growing evidence to show that the usefulness of the role the university plays in social, cultural and economic development (Arbo and Benneworth 2007, Benneworth and Conway 2009). Arbo and Benneworth (2007) in their review of literature on the role of universities in regional development establish that HEIs are often large strategic actors with the potential and capacity through teaching, research and service to build linkages between different actors, their resources, their systems, their processes and their intentions at the regional level. They add that universities are involved at the local level in a variety of networks in which HEIs pursue their missions. The mission of HEIs determines their priorities and responsibilities towards stakeholders, and it influences their interactions with industry, government and the public.

According to the stakeholder theory developed by Waddock, Bodwell and Graves (2002), there are three kinds of organizational stakeholders. The primary stakeholders are those who have a direct and mutual influence/stake in a company such as owners, managers, employees, customers, competitors and suppliers. Secondary stakeholders are those with some intermediary role, such as trade unions, non-governmental organizations (NGOs), activists, communities, banks, business services providers and governments. The third group are social and institutional stakeholders who are represented in the emergence of global standards, guidelines and 'best of' rankings, which report on initiatives focused on alternative bottom lines rather than the traditional financial bottom line. Figure 1 provides a graphic representation of the stakeholders of HEIs under the framework of social responsibility and stakeholder analysis.

Almost a century ago, Dewey (1916)<sup>2</sup> questioned the implications of democracy in education and established a direct correlation between educated citizens and civic engagement for the well-being of societies. Dewey

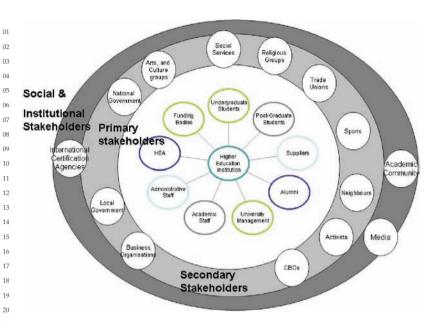


Figure 1: HEI's stakeholders. Source: Author's own concept.

conceived that we learn from experience and that genuine learning occurs when people are engaged in solving real problems and addressing genuine dilemmas in society. Consequently, in Dewey's view, education institutions have an instrumental mission to solve problems in society; and accordingly, academics and students have a social responsibility to work cooperatively to solve real problems in the community (Dewey 1916).

The civic purpose of higher education has been internally and externally challenged historically. In recent years, markets have demanded that HEIs make themselves more attractive to potential students and funding agencies. At the same time, policy-makers, philanthropic organizations and other civil society organizations have brought pressure to bear on HEIs to use their learning resources, technical expertise and reflexive knowledge more directly to benefit society. The have stressed that HEIs' governance should reflect much wider interests than just those of the scholarly community. These pressures have been coupled with changes in the funding of HEIs at the international level (Dearing 1997). Furthermore, the widespread recognition that the production and management of knowledge constitutes the most crucial factor in economic and social growth (Etzkowitz and Leydesdorff 1997; OECD 1996) has increased the demand on universities to produce knowledge as never before for civic, regional and national purposes (Kerr 1995) and to disseminate this knowledge widely across the population.

As has been identified by Hazelkorn (2009), there is an increasing 'marketization' of higher education; and in return for funding, governments and industry request income generation from HEIs. As a consequence, this has led to the idea that financing HEIs could be seen as an investment via the commercialization of patents and licences, rather than knowledge-creation for the sake of the enlightenment and betterment of society (Hazelkorn 2009).

- The Ley de Servicio Comunitario del Estudiante de Educación Superior was decreed by the Venezuelan National Assembly in September 2005. The law contains specific regulations regarding: principles, training for community service, supervision, duration, agreements with community organisations, rights and obligations for students and service receivers. enforcement. requirements and sanctions http://www.usb.ve/ proyectar/pdf/isceu.pdf.
- Under the Irish Universities Act 1997. The objects of a university shall include amongst others '(a) to advance knowledge through teaching, scholarly research and scientific investigation, (b) to promote learning in its student body and in society generally, (c) to promote the cultural and social life of society, (d) to foster a capacity for independent critical thinking amongst its students, (e) to support and contribute to the realisation of national economic and social development. (Universities Act 1997) Section 12).
- 5 Boland and McIlrath (2007) argue that a localization of (pedagogies of) civic engagement implies the development of a discourse, philosophy, values and practices which reflect local context and culture.

Several authors (Al-Kodmany 1999; Allen-Meares et al. 2005; Amey et al. 2002; Arbuckle and DeHoog 2004; Altman 1995; Barnett 1993; Percy, Zimpher and Brukardt 2007) argue that universities are actively willing to participate in the betterment of their communities and are developing strategies for addressing social issues in their communities through collaborative approaches. Various other authors (Aronson and Webster 2007; Buys and Burnall 2007; Chibucos and Lerner 1999) suggest that this return of universities towards their service-focused mission would have positive repercussions for both universities and communities.

03

06

07

09

13

14

16

17

26

32

33

34

35

39

42

However, there are limitations to that approach. Some researchers (Baum 2000; Benson and Harkavy 2000; Brohman, Gannitsos and Roseland 2003; Cherry and Shefner 2004; Cobb and Rubin 2006) emphasize the imbalance in power relationships and contradictory interests between universities and communities and the divergence between the rhetoric and reality of collaborations. These authors suggest that in order to improve this relationship, clarity and definitiveness about outcomes and resources and flexibility in the process should be stressed.

Others like Bourn, McKenzie and Shiel (2006) are particularly concerned about the centrality that 'global perspectives' should play within the curriculum and life of higher education. Still others (Chaskin et al. 2006) suggest placing the focus on locally applied knowledge, strengthening informal relationships and allocating resources to organizational structures dedicated to bringing both universities and their local communities, as well as theory and practice together.

In general, the literature on social and civic engagement of university with the local communities emphasizes the voluntary nature of the relationship between universities and communities. There are exceptions to this. For example, in Venezuela, community engagement by HEIs is compulsory and state-regulated. Under the *Community Service Law for the Higher Education Student*, undergraduate students in Venezuelan universities are obliged to donate a minimum of 120 hours in the second half of their degree to applying university-acquired knowledge to the service of community. In Ireland, the *Universities Act 1997*<sup>4</sup> establishes the obligation of Irish universities to comply with social responsibilities such as promoting the cultural and social life of society.

The role of the university in society has been a contested area for philosophers, economists, political scientists, educationalists, anthropologists, sociologists and other social scientists. Studies show that the university has a number of economic (Brisbin and Hunter 2003; Brooks and Schramm 2007; Forrant et al. 2001), social (Ball and Pence 2007; Garvin 1995; Holdsworth and Caswell 2004; Raphael et al. 1995; Rowe and Holdsworth 1997) and political (Giroux 2002; Lisman 1998; Sherman and Torbet 2000) functions. However, these functions are not mutually exclusive; and HEIs can be considered as multifunction institutions within societies. From this perspective, Sir David Watson (2007) argues that universities relate to their communities in three main ways, which he classifies as hierarchical orders of engagement. The first-order engagement implies that the university is civically engaged solely because it is a social institution; and as a social institution, the university acts as a moral force, while at the same time, it has a cultural role that changes according to national and regional contexts.<sup>5</sup> In contrast with the firstorder engagement, which dictates 'who the university is', the second-order engagement arises from what the university does. This second-order engagement is generally mediated by contracts. The third-order engagement refers to academic citizenship, which implies the commitments between university and its members.

Some authors have identified a particular set of activities and characteristics that define a civically engaged university. For example, Watson (2007: 140–141) holds that the *engaged university* has to pass a ten-point test, which consists of the following criteria:

- devise an attractive course portfolio;
- contribute to at least some aspects of research;
- engage economically and culturally with its community;
- be a comfortable and enjoyable place to work for everyone;
- be and be seen as being ethically and environmentally responsible;
- earn and sustain a positive reputation, locally, nationally and internationally;
- recruit and retain good staff and good students;
- understand itself, where it has come from, what challenges and opportunity it faces and how to meet these;
- improve the professional contributions of its alumni; and
- behave well.

02

03

06

09

10

12

13

14 15

16

18

19

20

23

25

26

32

39

40 41 42

43

45

51

Alternatively, González González and Fernández-Larrea (2006) establish five characteristics of community engagement as a university's function as follows:

- the most fundamental part of the relationship between university and society;
- its main function is the promotion and development of culture;
- it is produced through action and communication;
- it is focused on both the university community and the general community;
   and
  - it does not have a particular geographic limitation, since it can be carried out on-campus and off-campus.

This first section provided a contextualization of the evolving relationship between HEIs and the community. It discussed the impact of a fourth helix (the public) on universities, which, in addition to assuming an institutional entrepreneurial role, also have a more active civic role within the knowledge economy. The next section examines different conceptualizations of the CUPs, as models of civic engagement of HEIs.

# OVERVIEW IN THE AREA OF COMMUNITY-UNIVERSITY PARTNERSHIPS

The objective of this section is to provide a very broad overview on CUP. There are three main distinctive operative conceptualizations of a CUP as units of analysis. A CUP can be conceptualized as a relationship per se, based on the principle of cooperation between a university or a representative of it and a community-based organization, in which the organization is a proxy for community members. In that case, the unit of analysis is the relationship.

The second concept of a CUP refers to a functional unit within a university's organizational structure. The unit of analysis in this case is a division

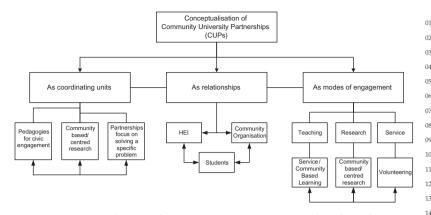


Figure 2: Conceptualisation of Community University Partnerships (CUPs). Source: Author's own concept.

within a HEI that coordinates activities and/or agreements with a community organization, in which the organization is a proxy for community members.

The third concept of a CUP refers to a mode of community engagement within the higher education context. Examples of modes of community/civic engagement are volunteering, service learning/community-based learning and community-based research.

Figure 2 below summarizes the conceptualization of CUPs.

CUPs, understood as coordinating units at the institutional level, have emerged in response to top-down mandates, bottom-up initiatives or a combination of these. In general, most CUP units have three main dimensions within their mission in which university and community partners collaborate together:

- pedagogies for civic engagement (PfCE) (community-based learning/service learning);
- community-based participatory research;
- partnership focus on solving a specific problem.

Within the literature, terms such as 'community-based research', 'community-wide research', 'community-centred research' and 'community-involved research' are often used interchangeably. However, the term community-based research is more widely used.

Sclove, Scammel and Holland (1998: 2), in their report on the community research system in the United States, define community-based research as the research that is 'initiated by communities and that is conducted for – and often directly by – communities (e.g., with civic, grassroots, or worker groups throughout civil society)'. In this report, they compare the community research system in the United States with the system in the Netherlands. Based on twelve case studies of organizations operating in institutional settings (either universities or community-based organizations), they observed that community-based research empowers and provides tangible benefits to social groups. These authors also revealed that the demand for community-based research in several cases is not met; and in most cases, research centres are forced to deny requests for research assistance either because of resource

17

19

20

21

23

24

25

32

33

34

35

constraints (e.g. funding, researchers) or because requests do not match the research agendas of the institutions.

Wetenschanswinkels in Dutch

Community-based research is also a response to the demand for integration research and practice, for greater community involvement and control of the research process and for combination of qualitative and quantitative methodologies (Israel et al. 1998). Israel et al. (1998) identified the following eight key principles of community-based research:

recognizes community as a unit of identity;

01

02

03

06

07

09

10

11

12

13

14

15

16

17

18

19 20

22

23

25

26

27

28

32

33

35

41

46 47 48

51

- builds on the strengths and resources within the community;
- facilitates collaborative partnerships in all phases of the research;
- integrates knowledge and action for mutual benefit of all partners;
- promotes co-learning and empowering process that attends to social inequalities;
- involves a cyclical and iterative process;
- addresses issues from positive and ecological perspectives;
- disseminates findings and knowledge gained to community-based and university-based partners.

## Science shop/research helpdesk

A science shop is a non-profit unit that provides participatory research support to civil society (e.g. interest groups, community-based organizations, nonexpert groups) (http://www.scienceshops.org). Science shops are bottom-up approaches and offer demand-driven research in the sense that they respond to the needs of civil society for knowledge and expertise.

The first science shops<sup>6</sup> emerged in the Netherlands as voluntary initiatives led by chemistry students to support activist groups in the community in areas ridden with soil pollution in the early 1970s. Figure 3 below illustrates the science shop model of CUP.

The Dutch model of the 1970s re-emerged in the Netherlands in the 1990s, and it is currently a comprehensive research system in which interest groups/civil society/community-based organization located anywhere in the country can address virtually any topic and have it examined by an academic

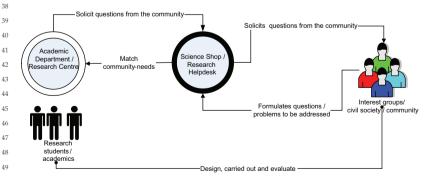


Figure 3: Science shop model of community-university partnership. Source: Author's own concept.

department or a research centre. Each university in the Netherlands has one or more science shops staffed with both paid and volunteer personnel.

Some authors (Farkas 1999; Sclove, Scammell and Holland 1998) argue that the science shop model has similarities with the technology transfer/consultancy models in the sense that these attempt to redirect university research and development (R&D). However, they radically differ in the sense that the science shop model is mainly focused on less financially powerful actors within society.

The science shop model is encouraged by the European Commission, which sees this model as a way to bring research to the service of the citizens, to help create an awareness of society's needs and to respond to them (European Commission 2003). The European Commission considers that science shops help 'to pave the way towards "science for society" and "society for science" (European Commission 2003) in a cost-effective way.

13

14

17

35

39

52

Within university settings, students who conduct their academic research projects through science shops are usually awarded with credits. In general, science shops coordinate activities in a broad spectrum of disciplines across all the sciences (human/social and other sciences).

Within the social sciences there are a variety of research approaches and paradigms in which participants are engaged in most of the aspects of the research process and that are committed to benefiting the participants either through direct intervention or by using results to inform action for change (e.g. through policy-making).

There are abundant examples of CUPs as units within HEIs in each continent. For instance, North American universities (such as Florida State University, Michigan University, Northwestern University, Purdue University, Rutgers University, St Francis Xavier University, Tufts University, University of Connecticut, University of Georgia, University of Minnesota, University of Michigan, University of Maryland and the University of Pennsylvania) have comprehensive coordinating units for community engagement. In Europe, L'Université Populaire de Caen, the National University of Ireland, Galway, the University of Bradford, the University of Brighton and the University of Bristol also have units dedicated to community engagement. In Australia, the University of Queensland and in Africa, the University of Kwala Zulu Natal (UKZN) are examples of the allocation of strategic resources for engaging with the needs of their local communities.

The next section examines the application of the civically engaged university model in the Colombian context.

#### THE CIVICALLY ENGAGED UNIVERSITY MODEL IN COLOMBIA

Within Colombia, there are several initiatives focused explicitly on the civic role of higher education. There is one initiative at the national level known as Opción Colombia.Opción Colombia (http://opcioncolombia.org/) is a non-profit, non-governmental organization created in 1991, which aims to contribute to the maximization of the social impact of higher education. Currently, 93 universities in Colombia are part of Opción Colombia. This organization focuses on the participation of university students and recently graduated professionals from different disciplines in specific projects through programmes of community development and community-based research and the development of methodologies of civic and social participation in Colombia and Latin America.

Opción Colombia acts as a communication channel between HEIs, communities and governmental and non-governmental organizations. It also promotes learning processes and spaces for the exercise of active citizenship for the students and new professionals. Besides, it emphasizes the rights of communities to take responsibility for their development and promote the development of projects that are in accordance with their local needs.

Within the Opción Colombia, there are two main platforms:

- Opción Colombia groups are groups of HEIs' students, which develop projects of social impact in their own localities.
- Internships consisting of placement in a community in a geographical region different from the one where the students' HEI is located. During a semester the students apply their professional profile to social impact projects.

However, there are also initiatives at the regional level that emphasize fostering the triple helix culture as a system of interactions for promoting innovation as a driver for sustainable economic and social development. For instance, in the region of Antioquia, a formal regional innovation system was established in 2003 with focus on regional technological progress. A committee was created with managers from universities, companies and regional and national government, which evolved into a regional institution, Tecnnova. The objective of this institution is to foster market-driven research as an engine for competitiveness, technological development and innovation at the regional level. Tecnnova (www.tecnnova.org) acts as a bridge between the industry's needs and the capabilities of universities' research groups to respond to these needs. At the same time, it assists companies in accessing public funds allocated by the national government to encourage scientific and technological progress in Colombia.

In the case of Antioquia, university–industry–government interaction emerged as a response to the economic and social crisis in the region. This regional university–industry–government committee has, since its creation, been focused on the production of knowledge that could be applied to the local context in the framework of innovation (Cataño and Botero 2009). This committee is dedicated to the development of the region, and it has identified the following four key features guiding the missions of its universities (Cataño and Botero 2009):

- 1. the triple helix interaction constitutes social capital for the region;
- the interaction between university-industry-government contributes to the development of intellectual capital in the region positively affecting the accumulation of productive capital;
- a regional triple helix culture increases regional identity, reinforcing recognition and capabilities to generate relevant knowledge to the local context;
   and

4. through the combination of the three strategies alluded to in (1), (2) and (3), the regional triple helix produces systemic trust.

In order to implement this triple helix strategy, Cataño and Botero (2009) argue that university, industry and government should undertake a set of activities that can be seen as prerequisites for its successful implementation

and challenges for policy-making. For instance, universities should centre their research on knowledge production to satisfy the regional demands of the productive sectors. They should also be active in the creation of spin-offs and the generation of income from marketing their ideas through intellectual property mechanisms. The triple helix strategy requires the national government to formulate and implement science and technology public policies within the framework of innovation. It also requires national and regional governments to increase the share of investment in science and technology in total public expenditure. Industry would be expected to participate in the design of applied research projects in collaboration with universities; to influence the design of training in higher education; and to be able to readily absorb university graduates.

#### CONCLUSIONS

Since the establishment of the first universities in the eleventh century, the roles that HEIs have in the communities in which they are located have varied according to their specific social, environmental, historical, cultural, political and economic circumstances. Increasingly, HEIs are expected to go beyond their social responsibility of teaching and research, to play an active role in addressing issues relating to diverse local, regional, national and global systems. This challenge poses internal difficulties for them since it requires interdisciplinary collaboration, which might influence HEIs' traditional rewards systems. Furthermore, the relationship between universities and communities may challenge power hierarchies based on cultural and professional status. Nonetheless, there are approaches to university–community partnerships that support durable commitment: trust building, definition of negotiation of roles, respect for social, academic, cultural, professional and economic diversity and reciprocity for the benefits of knowledge creation and knowledge application.

#### **ACKNOWLEDGEMENTS**

This article was based on an unpublished extensive literature review in the area of community—university partnerships (CUPs) that was carried out during my postdoctoral post in the Community Knowledge Initiative (CKI) at the National University of Ireland, Galway, during 2007 under the supervision of Dr Iain MacLaren.

#### **REFERENCES**

- Al-Kodmany, Kheir (1999), 'University-community partnerships: Unleashing technical and local expertise', *Journal of Urban Technology*, 6, pp. 39–63.
- Allen-Meares, Paula, Hudgins, Cynthia A., Engberg, Mark E., et al. (2005), 'Using a collaboratory model to translate social work research into practice and policy', *Research on Social Work Practice*, 15, pp. 29–40.
- Altman, David G. (1995), 'Sustaining interventions in community systems: On the relationship between researchers and communities', *Health Psychology*, 14, pp. 526-536.
- Amey, Marilyn J., Brown, Dennis F. and Sandmann, Lorilee R. (2002), 'A Multidisciplinary Collaborative Approach to a University-Community Partnership: Lessons Learned', *Journal of Higher Education Outreach and Engage*ment, 7, pp. 19-26.

170

13 14

18

19

24

25

28

31 32

35

45

46

- Arbo, Peter and Benneworth, Paul (2007), 'Understanding the regional contribution of higher education institutions: A literature review', OECD Education Working Paper No. 9, Organisation for Economic Co-operation and Development (OECD, Paris), p. 78.
- Arbuckle, Margaret Bourdeaux and DeHoog, Ruth Hoogland (2004), 'Connecting a university to a distant neighborhood: Three stages of learning and adaptation', *Journal of Community Practice*, 12, pp. 53–70.
- Aronson, Keith R. and Webster, Nicole (2007), 'Find More Like This, A Model for Creating Engaged Land-Grant Universities: Penn State's Engagement Ladder Model', Innovative Higher Education, 31, 265-277.
  - Ball, Jessica and Pence, Alan R. (2007), Supporting Indigenous Children's Development: Community-university Partnerships, University of British Columbia Press.

12

13

20

21

22

52

- Barnett, K., (1993), Collaboration for community empowerment: re-defining the role of academic institution. Developing New Partnerships to Improve Community Quality of Life, Berkeley Center for Community Health, School of Public Health, University of California at Berkeley.
- Baum, Howell S. (2000), 'Fantasies and realities in university-community partnerships', *Journal of Planning Education and Research*, 20, pp. 234–46.
  - Benneworth, Paul and Conway, Cheryl (2009), Characterising Modes of University Engagement with Wider Society: A Literature Review and Survey of Best Practice, Newcastle: Newcastle University.
- Benson, L., Harkavy, I. and Puckett, T. (2000), 'An implementation revolution as a strategy for fulfilling the democratic promise of university-community partnerships: Perm-West Philadelphia as an experiment in progress', Non-profit and Voluntary Sector Quarterly, 29, pp. 24–45.
- Boland, Josephine and McIlrath, Lorraine (2007), 'The process of localising pedagogies for civic engagement in Ireland: The significance of conceptions, culture and context', in L. McIlrath and I. Mac Labhrainn (eds), *Higher Education and Civic Engagement: International Perspectives*, Hampshire: Ashgate, pp. 83–99.
- Bourn, D. A., McKenzie, A. and Shiel, C. (2006), *The Global University: The Role of the Curriculum*, London: Development Education Association.
- Brisbin, R. A. and Hunter, S. (2003), 'Community leaders' perceptions of university and college efforts to encourage civic engagement', *Review of Higher Education*, 26, pp. 467–86.
- Brohman, J., Gannitsos, I. and Roseland, M. (2003), 'Issues of participation in a University-NGO, North-South partnership: Internationalizing a CED program', Canadian Journal of Development Studies-Revue Canadienne D Etudes Du Developpement, 24, pp. 89–105.
- Brooks, N. and Schramm, R. (2007), 'Integrating economics research, education, and service', *Journal of Economic Education*, 38, pp. 36–43.
- Buys, Nicholas and Bursnall, Samantha (2007), 'Establishing universitycommunity partnerships: Processes and benefits', Journal of Higher Education Policy & Management, 29, pp. 73–86.
- Cataño, Gabriel and Botero, Paula (2009), 'Dinámica y Dilemas de una Acción
   Colectiva: Estudio de Caso del Comité Universidad, Empresa, Estado en
   Antioquia (2003–2008)', Universidad-Empresa-Estado, 2, pp. 38–40.
- Chaskin, Robert J., Goerge, Robert M., Skyles, Ada, et al. (2006), 'Measuring social capital: An exploration in community-research partnership', *Journal of Community Psychology*, 34, pp. 489–514.

- Chibucos, Thomas R. and Lerner, Richard M. (1999), Serving Children and Families Through Community-University Partnerships: Success Stories, Boston: Springer.
- Cherry, Donna J. and Shefner, Jon (2004), 'Addressing barriers to university-community collaboration: Organizing by experts or organizing the experts?', *Journal of Community Practice*, 12, pp. 219–33.
- Cobb, P. D. and Rubin, B. A. (2006), 'Contradictory interests, tangled power, and disorganized organization', *Administration & Society*, 38, pp. 79–112.
- Cooper, C. W. and Christie, C. A. (2005), 'Evaluating parent empowerment: A look at the potential of social justice evaluation in education', *Teachers College Record*, 107, pp. 2248–2274.
- Dearing, Ron (1997), Higher Education in the Learning Society, Leeds, UK: National Committee of Inquiry into Higher Education.

13

37

42

- Dewey, John (1916), Democracy and Education. New York: The Free Press
- Etzkowitz, Henry (2008), *The Triple Helix: University-Industry-Government Innovation in Action*, New York, NY: Routledge.
- Etzkowitz, Henry and Leydesdorff, Loet (1997), Universities and the Global Knowledge Economy: A Triple Helix of University industry-Government Relations, London: Cassell.
- European Commission (2003), *Science Shops Knowledge for the Community*, Luxembourg: Office for Official Publications of the European Communities.
- Farkas, Nicole Elizabeth (1999), 'Dutch science shops: Matching community needs with University R&D', *Science Studies*, 12, pp. 33–47.
- Forrant, Robert, Pyle, Jean L., Lazonick, William, et al. (2001), *Approaches to Sustainable Development: The Public University in the Regional Economy*, Amherst, MA: University of Massachusetts Press.
- Garvin, T. (1995), 'We're strong women building a community-university research partnership', *Geoforum*, 26, pp. 273–86.
- Giroux, H. A. (2002), 'Neoliberalism, corporate culture, and the promise of higher education: The university as a democratic public sphere', *Harvard Educational Review*, 72, pp. 425–63.
- González González, Ramón Gil and Fernández-Larrea, Mercedes González (2006), 'Extensión universitaria: una aproximación conceptual desde la perspectiva cubana', Revista Cubana de la Educación Superior, 26, pp. 69–76.
- Hazelkorn, Ellen (2009), 'Community engagement as social innovation', in L. Weber and J. Duderstadt (eds), VIIth Glion Colloquium: The Role of the Research University in an Innovation-Driven Global Society. London and Geneva: Economica.
- Holdsworth, Sarah and Caswell, Tricia (2004), *Protecting the Future: Stories of Sustainability from RMIT University*, Australia: CSIRO Publishing.
- Israel, Barbara A., Schulz, Amy J., Parker, Edith A., et al. (1998), 'Review of community-based research: Assessing partnership approaches to improve public health', *Annual Review of Public Health*, 19, pp. 173–202.
- Kerr, Clark (1995), The Uses of the University, London: Harvard University Press. Leydesdorff, Loet and Etzkowitz, Henry (2003), 'Can "The Public" be considered as a fourth helix in university-industry-government relations? Report of the fourth triple helix conference', Science and Public Policy, 30, pp. 55–61.
- Lisman, C. David (1998), Toward a Civil Society: Civic Literacy and Service Learning, London: Greenwood press.
- OECD (Organization for Economic Co-Operation and Development), (1996), 'The Knowledge-Based Economy', OECD, (Organization for Economic Co-Operation and Development), Paris.

- OECD (Organization for Economic Co-Operation and Development), (2004), 'OECD Urges Educators to Address Social Cohesion Risks', *Meeting of the OECD Education Ministers: Raising the Quality of Learning for All*, OECD (Organization for Economic Co-Operation and Development), Dublin.
- Percy, Stephen L., Zimpher, Nancy L. and Brukardt, Mary Jane (2007), Creating a New Kind of University: Institutionalizing Community University Engagement, Boston, MA: Anker Publishing Co.
- Raphael, D., Brown, I., Renwick, R. C., et al. (1995), 'The quality of life of senior living in the community: A conceptualization with implications for public health practice', Canadian Journal of Public Health-Revue Canadienne De Sante Publique, 86, pp. 228–33.
- Rowe, K. E. and ByongSuh, K. (1997), 'The rise of women's education in the United States and Korea: A struggle for educational and occupational equality', *Asian Journal of Womens Studies*, 3, pp. 30–93.
- Saad, Mohammed, Zawdie, Girma and Malairaja, Chandra (2008), 'The triple helix strategy for universities in developing countries: The experiences in Malaysia and Algeria', *Science and Public Policy*, 35, pp. 431–43.
- Sclove, Richard E., Scammell, Madeleine L. and Holland, Breena (1998), Community-Based Research in the United States: An Introductory Reconnaissance, Including Twelve Organizational Case Studies and Comparison with the Dutch Science Shops and the Mainstream American Research System, Amherst, MA: Loka Institute.
- Sherman, Francine T. and Torbert, William R. (2000), Transforming Social Inquiry, Transforming Social Action: New Paradigm for Crossing the Theory Divide in Universities and Communities, New York, NY: Springer.
- Waddock, Sandra A., Bodwell, Charles and Graves, Samuel B. (2002), 'Responsibility: The new business imperative', *The Academy of Management Executive*, 16, pp. 132–48.
- Watson, David (2007), Managing Civic and Community Engagement, Berkshire, England: Open University Press.

#### **SUGGESTED CITATION**

Gonzalez-Perez, A. (2011), 'The civically engaged university model in Colombia', *International Journal of Technology Management and Sustainable Development*, 9: 3, pp. 161–173, doi: 10.1386/tmsd.9.3.161\_1

#### **CONTRIBUTOR DETAILS**

- Associate Professor Dr Maria-Alejandra Gonzalez-Perez is head of department of International Business at the Universidad EAFIT (Colombia). She is also a research associate at the Centre for Innovation and Structural Change (CISC) at the National University of Ireland, Galway (Ireland).
- Contact: Internacionales Universidad EAFIT, Carrera 49, No. 7 Sur 50, bloque 26 Oficina 609 Medellin-Colombia.
- E-mail: mariaalejandra.gonzalezp@gmail.com/mgonza40@eafit.edu.co

02

03

06

07

09

10

12

13

15

16

19

20

21

23

26

27

28

32

33

35

39

41

42

45

48