

***Disciplinary Training and Professional Practices Effects on Soft Skills
Development***

Irina Granados, Uniminuto, Colombia
Andrea Romero, Uniminuto, Colombia
Glenny González, Uniminuto, Colombia
Sandra López, Uniminuto, Colombia

The Asian Conference on Education 2019
Official Conference Proceedings

Abstract

At present, the development of soft skills or transversal skills has become a relevant issue for higher education institutions. The purpose of this research is to evaluate the discipline training and professional practices effect on the soft skills development of the UNIMINUTO Vicerectoria Regional Sur (VRBS) students. This research will be develop under a pragmatic paradigm and a quantitative model design based on an exploratory investigation. The participants will be 144 undergraduate students of UNIMINUTO Vicerectoria Regional Sur (VRBS) of the programs: social work, social communication, and psychology. For the analysis of the results, the results of the compeTEA test and the observations made were taken, which, when compared, showed the need to do a longitudinal investigation and allowed to identify the skills that should be developed by each program.

Keywords: Soft skills, Disciplinary Training and Professional Practices

iafor

The International Academic Forum

www.iafor.org

Introduction

At present, higher education institutions face a fundamental challenge that is the integral formation of society, which requires a more holistic view of pedagogical processes, which transcends the teaching of technical skills. Singer, Guzmán and Donoso (2009) highlight that technical competencies or “hard skills” are necessary for the development of a profession and in most cases, they are the central interest of university institutions, given that the evaluation strategies of learnings acquired in higher education nationally and internationally usually measure this type of competencies. Additionally, it has been considered that the development of hard skills largely guarantees good employment and professional success (Bassi, Busso, Urzua & Vargas, 2012).

However, numerous studies show that the development of hard skills is not enough to obtain job success, since it has been found that the results of the tests that measure these competencies and the academic reports that focus on them are not necessarily predictors of professional success (Singer et al., 2009). That is why; university centers should also encourage the development of other types of skills such as soft skills that are complementary to hard skills.

In this regard, Raciti (2015) expresses that soft skills are related to personal well-being, social adjustment and adaptation to the work context. Which is very important in a globalized world that is constantly changing, in which very often hostile situations must be assumed, before people feel vulnerable or incapable, to others, of demanding a permanent adjustment and constant adaptation to the medium (De la Fuente, 2012). Therefore, it is to be considered that the analysis and training of soft skills in university contexts, has the purpose that the newly graduated student is trained to solve everyday problems, lead groups, be proactive and have the ability to generate and undertake ideas facing adversities for employability (Agudelo, 2015).

However, and despite the need and importance of their development, research in the area is limited, some of the most representative exploratory studies in this regard are those conducted by John (2009), Singer et al., (2009), Fernández and Tapia (2012), Albarrán and González (2015) and Gómez, Manrique-Lozada and Gasca-Hurtado (2015). In the documentary review carried out, it was found that in the Latin American context research on the topic of soft skills is very recent. However, institutions such as the World Bank (2014), the Inter-American Development Bank (Bassi, Busso, Urzúa and Vargas, 2012), the American Association of Colleges and Universities (2015), the University of Angus in Scotland (Kechagias, 2011) and the OECD (Miyamoto, Huerta, Kubacka, Ikesako, and Oliveira, 2015). They have been interested in identifying, evaluation, training and impact of soft skills in diverse populations and in other contexts than North American, which is where the soft skills have been most developed research on the subject since the 70s.

In relation to the previously documentary review described and based on the experience of the authors of this article as teachers, it was proposed to develop a research on soft skills in students of the Corporación Universitaria Minuto de Dios - UNIMINUTO. This institution contemplates in the profiles of applicants and graduates, which not only have the capacity to analyze in a given discipline, but also have a high degree of human sense and willingness for social service. It will be

represent in an interest in working with individuals, groups and organizations those results in professional training interested in leading and seeking integral solutions from a solid humanistic formation (Corporación Universitaria Minuto de Dios, 2014). That is, the institution recognizes the importance of training students in life skills such as soft skills. However, even if the interest and curricular placement of UNIMINUTO are direct to the development of soft skills, it has not been sufficient, since these demand more time and demand, as indicated by Singer et al. (2009), hard skills in general tend to train quickly, but soft skills training can take years and require explicit training.

As teachers, we have identified in the interaction with UNIMINUTO students that some of them present certain difficulties in interpersonal relationships, mainly due to problems in communication, negotiation and empathy, as well as, lack of strategies to solve problems, make decisions, think critically, and anticipate consequences of acts and modulate emotional reactions. Thus, it is necessary to reflect on the educational role of the institution, through its different programs, in these skills, as these turn out to be a fundamental pillar in the formation of the UNIMINUTO student. However, there is no objective evaluation of the soft skills acquired by university students through their professional training and much less evaluate the effect of different pedagogical practices in the training of these skills. Therefore, the following question arises: What is the effect of disciplinary training and professional practices in the development of soft skills in the students of the humanities programs (social work, psychology and social communication) of the UNIMINUTO Vicerrectoría Regional Sur?

With the development of the research, we expected to benefit the participating student community, through the identification of priority needs for training in personal skills that can have an important impact on the work area and professional development, which will allow generating institutional actions to strengthen the profile of UNIMINUTO graduates. Faced with this, it is important to note that the results obtained will allow considering whether pedagogical adjustments are necessary both to the curricular component and to the professional practices in order to train professionals with the capacity to do and the skills necessary for be.

Theoretical approach

In the theoretical approaches made to soft skills, it is evident that there are several ways to name them in the scientific literature: non-cognitive skills (Cunha & Heckman, 2008), socio-emotional skills (Ayrton Senna Institute, 2014), transversal competences (Beneitone, P; Esquetini, C; González, J; Marty, M; Siufi, G & Wagenaar, R, 2007; Raciti, 2015)., Life skills (World Health Organization, 2003), among others. In addition, different conceptualizations and classifications of these skills have been develop.

Within the framework of this project, two definitions that guided the development of the research were resume. The first is that of the World Health Organization (2003), which defines soft skills as the set of skills of a socio-affective nature necessary for interaction with others, which allow them to face daily challenging demands. The second, is from the Ayrton Senna Institute (2014), which states that these skills are necessary to interact with others and with oneself, since they involve managing

emotions, setting-achieving goals, making decisions autonomously and responsible, face adverse situations in a creative and constructive way.

Next, some of the most relevant classifications of soft skills in the research background are highlight. Among them, the proposal made by Mangrulkar, Whitman and Posner (2001) stands out, in which three categories suggested: interpersonal skills, which include assertive communication, negotiation, trust, cooperation and empathy. Cognitive skills, which involve skills for problem solving, decision making, critical thinking, self-assessment, analysis and understanding of consequences. Finally, there are the emotional control skills, which correspond to the skills necessary for emotional management and recognition in situations of stress and intense feelings, such as anger, sadness and frustration.

On the other hand, Singer et al. (2009) create the classification of soft skills from three categories: *Generic or behavioral*, which are required for the execution of any type of work, which include interpersonal skills, integrity, proactivity and initiative, reliability and predisposition to learn. *Basic or Essential*: which are those that adapt to the type of position or industry, such as assertive communication, teamwork, adaptability, flexibility, service orientation and creativity. *Technical or Functional*, which are specific to the position to perform, such as conflict management, team building, training and mentoring of supervised, motivation, support for supervised, entrepreneurship and development of social networks.

Shakir (2009), meanwhile, classifies soft skills into personal attributes, interpersonal skills and problem solving and decision-making, which are represent in the following seven traits: leadership, communication, teamwork, critical thinking and problem solving, lifelong learning and information management, entrepreneurship, professional ethics and morals.

Methodology

This research was develop based on a pragmatic paradigm and a mixed methodology. A simultaneous type VII model design was used, proposed by Rocco, Bliss, Gallagher and Pérez-Prado (2003), in which the qualitative and quantitative application and analysis is carried out simultaneously. Likewise, a concurrent nest strategy was use, proposed by Creswell (2014), in which different groups or levels are study to obtain a broader perspective of the phenomenon to be study.

The student population of the social work, psychology and social communication programs of the UNIMINUTO Vicerrectoría Bogotá Sur is composite with 1864 students. For the selection of the participants, a non-probabilistic sampling was carry out for convenience, from which the information of 144 undergraduate participants from the previously mentioned humanities programs was collect. These were select for the characteristics they share, as they respond to the social sector, and were distribute in three samples: the first, composed of students who are starting their academic program, the second, by students who are close to starting their professional practice and the third, made up of students who are already finishing their academic program.

The instruments used to gather information were the compeTEA test, a questionnaire designed by Arribas and Pereña (2015), which aims to evaluate 20 competences at a personal and occupational level, through a test with 170 items. In addition, a guide for the measurement of soft skills from interactive exercises, based on the work of McKenzie (2014), in which an observation list was made with 10 items that evaluated active listening, empathy, assertiveness, self-confidence, influence, leadership, initiative, organization and teamwork.

The investigation was executed in four phases. In phase one, the theoretical conceptualization and design of tools for data collection was carried out. In phase two, the characterization of professional practice and the measurement of soft skills in sample 1, 2 and 3 were performed. In phase three, the systematization and analysis of the data collected was performed. In phase four, the results report was prepared.

During the completion of phase I, in the review of various databases, few documents were found in Spanish on soft skills, most of them were published recently, from 2009 onwards, and likewise, many of them are not free access. However, when the search on the subject is carried out in English, a greater volume of literature appears from the 70s onwards. Another aspect to highlight, which was previously mentioned, is that literature on soft skills in Latin America is scarce.

For phase II, characteristics were evidence in the participants of the samples that may affect their differentiation, since, due to the flexibility of the curriculum of the programs, since there are no prerequisites of some academic spaces, students could be taking subjects from different semesters, and so for future research the type of sampling should be modified. In addition to this, in the interactive exercises, the problem situation was changed, since in the first applications a role was assigned to each participant, which was confusing and could limit their participation.

In phase III, tabulation of the results of the compeTEA test is performed, according to the level of competence that is thrown in the proofreading profiles of the test. In addition to this, tabulation of the observation list that was taken from the McKenzie interactive exercises (2014) is performed, in which it is scored with a 1 (if it complies) or with a 0 (does not comply) according to the observation made. Subsequently, the qualitative analysis of the observations reported by the researchers of the interactive exercises was performed.

Conclusions

Findings

For the analysis of the results, the levels zero (0) to four (4) were taken by the compeTEA test, in the competencies Self-control, Confidence and self-confidence, Communication, Influence, Teamwork, Initiative, Leadership, Planning and organization, which relate to the criteria observed in the interactive exercise: Active listening, Empathy, Orality, Self-confidence, Influence, Leadership, Cooperation, Initiative, Organization and Teamwork.

Comparisons of the test results were made from cross tables or contingency tables of each of the competitions, it was found that the competitions in which the highest level is scored in sample 1, that is, students who are at the beginning of professional training, are influence and teamwork.

In sample 2 is also find that a level 3 in teamwork and leadership was reached, while in sample 3, which corresponds to the students who are finishing their professional training, only the influence competition is in a level 3 and present a level 1 in the initiative competition.

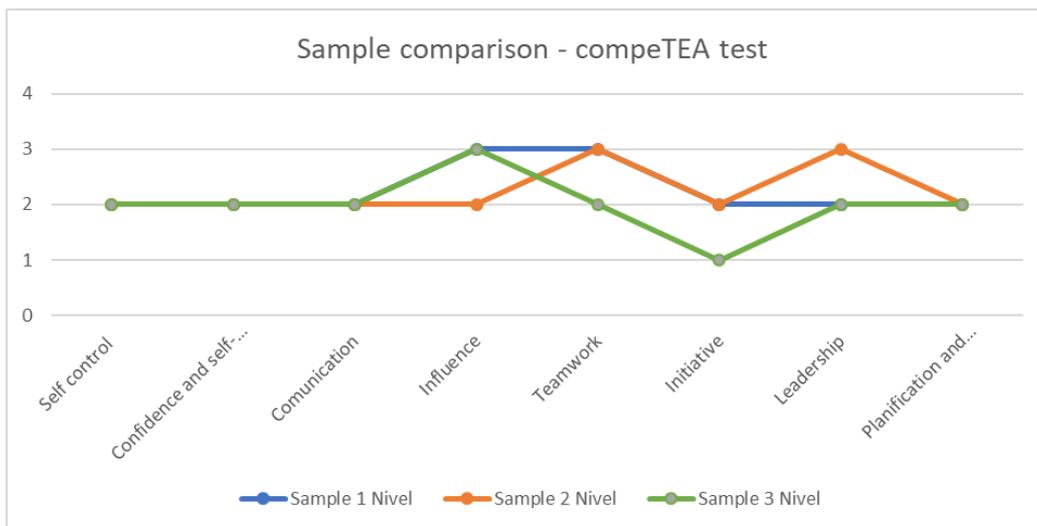


Figure 1: Sample comparison - compeTEA test

In the comparison of the observations by samples, the means of each observed criterion were taken it is found that in all the samples the criterion of active listening is the one that scores highest, however, sample 1 is at a high level of teamwork, unlike samples 2 and 3, which report a higher average in the oral criteria. In all samples, a low score is observe in the organizational criteria.

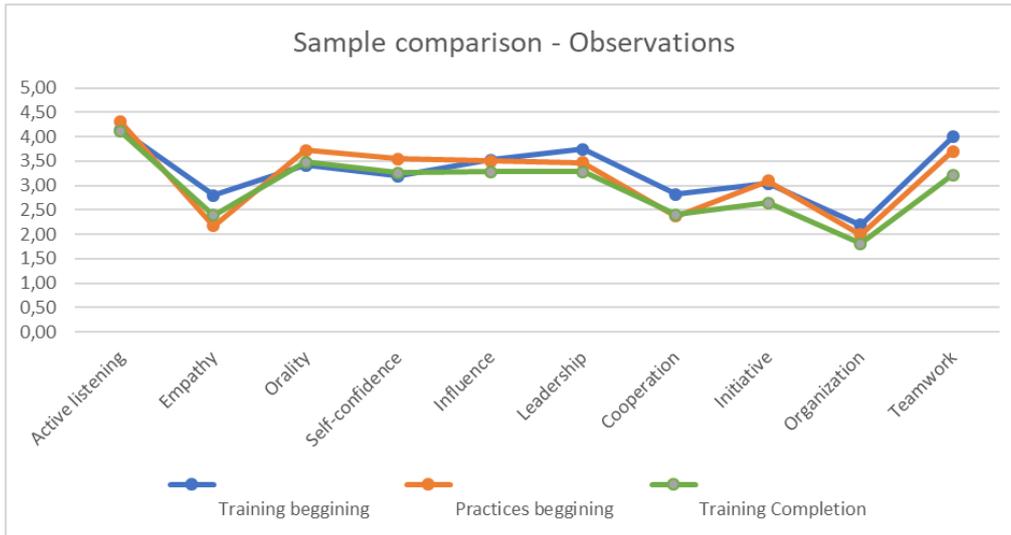


Figure 2: Sample comparison – Observations

In the program comparison, it is evident that in the compeTEA test the social communication program has a level 3 in the Communication, Influence, Work in and Leadership competences. While the psychology program presents a high level in teamwork and a level of one (the lowest level evaluated) in initiative; while the sample of the social work program only presents level 3 in influence.

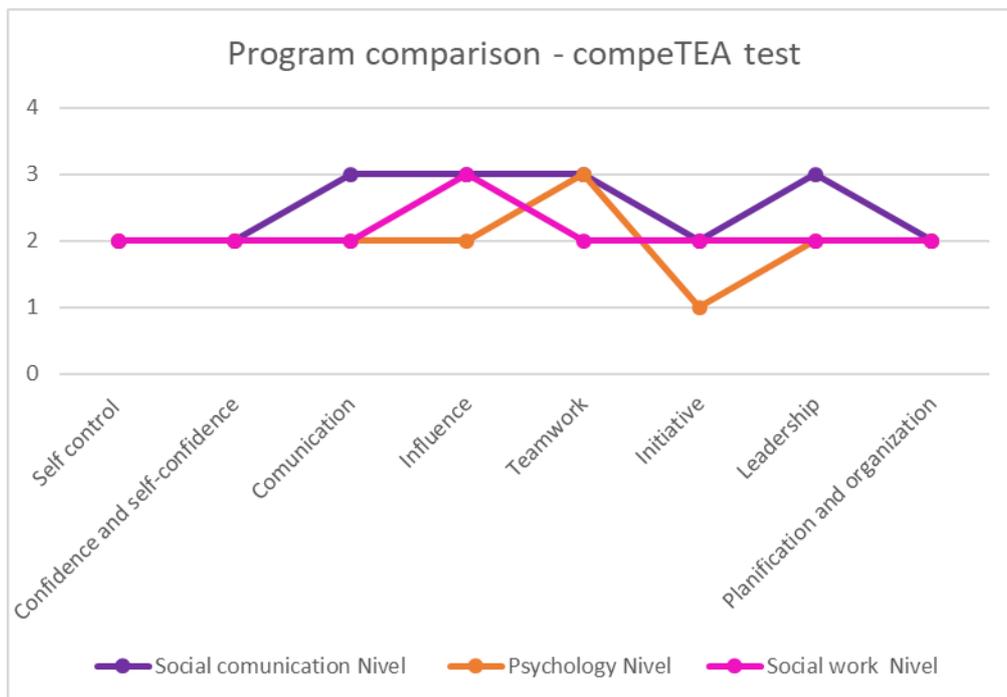


Figure 3: Program comparison - compeTEA test

As evidenced in graph 4, in the sample the observation criterion that had the highest average was active listening. In accordance with the test, the comparison of the observation by programs is that the criteria that have a higher average in the communication program are influence and leadership. While presenting a low average in empathy.

In the psychology program, it is again evident that there is a high score in teamwork, while the organization should be develop as in the social work program, where it was also score under this item, these groups should be considered to have a greater number of students, which can affect the results in this competition. The criterion that scored the highest participants in the social work program is that of orality.

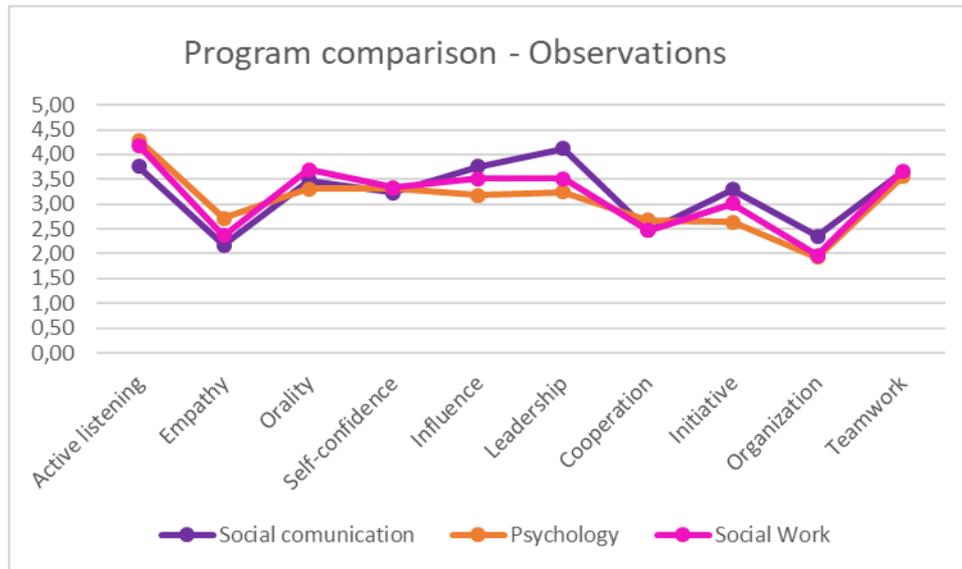


Figure 4: Program comparison – Observations

Implications and limitations

The results do not show a clear effect of the disciplinary training in the development of soft skills, since the results behave similarly in the measurements of the sample data and, on the contrary, a lower score is shown in the sample 3 , corresponding to students who are finishing their professional training, which must be improved.

It is recommend to review the strategies used by the social communication program, which shows greater measures in communication, influence and leadership, and can serve as a guide for the other programs in the training of skills and to potentiate those competencies in which they are evidence weaknesses like empathy.

Longitudinal studies are recommend for having an accurate measurement of the effect of training on the development of skills, taking into account the difficulties in measuring these competencies, as well as randomized probabilistic sampling so that the distribution of data is smaller.

References

Agudelo, N. L. (2015). Recursos relacionales para la empleabilidad en profesionales recién egresados de una universidad pública (Tesis de Maestría). Recuperada de <http://hdl.handle.net/10893/8844>.

Albarrán, A., & González, C. (2015). Introduciendo habilidades no cognitivas en liceos técnicos chilenos: una evaluación social. Chile: Facultad de Economía y Negocios Escuela de Economía y Administración Universidad de Chile. Recuperado de <http://www.repositorio.uchile.cl/handle/2250/129700>.

Arribas, D & Pereña, J. (2015). *CompeTEA*, tercera edición. TEA ediciones, S.A.U. Madrid, España.

Asociación Americana de Colegios y Universidades. (2015). *Falling short? Colleague learning and careersuccess. Selected findings from online surveys of employers and college students conducted on behalf of the Association of American Colleges and Universities*. Washington, DC: Hart Research Associates.

Ayrton Senna Institute. 2014. UNESCO. *Competências Socioemocionais*. Material de discussão.

Banco Mundial (2014). *STEP Skills Measurement. Overview & Initial Results*. PPT presentation.

Bassi, M., Busso, M., Urzua, S., & Vargas, J. (2012). *Desconectados: Habilidades, educación y empleo en América Latina*. Recuperado del sitio de Internet del Banco Interamericano de Desarrollo: <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=36723125>.

Beneitone, P; Esquetini, C; González, J; Marty, M; Siufi, G & Wagenaar, R. (2007). *Reflexiones y perspectivas de la educación superior en América Latina, Informe Final – proyecto Tunning- América Latina (2004-2007)*. Publicaciones de la Universidad de Deusto. España.

Corporación Universitaria Minuto de Dios. (mayo, 2014). *Re: Proyecto Educativo Institucional PEI* (Página de internet). Recuperado de <http://www.uniminuto.edu/proyecto-educativo-institucional-pei>.

Creswell, J. 2014. *Research Design, Qualitative, Quantitative, And Mixed Methods Approaches*. Fourth Edition. SAGE publications. California, EE.UU.

Cunha, F & James Heckman. (2008). “Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation.” *Journal of Human Resources* 43(4): 738–82.

De la Fuente, J. R. (2012). Impactos de la globalización en la salud mental. *Gaceta Médica de México*, 148, 586-90. Recuperado de http://www.anmm.org.mx/GMM/2012/n6/GMM_148_2012_6_586-590.pdf.

Gómez, M. C., Manrique-Lozada, B., & Gasca-Hurtado, G.P. (2015). Propuesta de evaluación de habilidades blandas en ingeniería de software por medio de proyectos universidad-empresa. *Revista Educación en Ingeniería*, 10(19), 131-140. Recuperado de <https://www.educacioningenieria.org/index.php/edi/article/view/549>.

Fernández, J., & Tapia. (2012). *Emprendimiento y desarrollo de competencias blandas por alumnos de ingeniería comercial Universidad de la Serena*. Chile: Universidad de la Serena. Recuperado de <http://dx.doi.org/10.15433/ruta.v0i14.190>

John, Jessy, (2009). Study on the Nature of Impact of Soft Skills Training Programme on the Soft Skills Development of Management Students. *Pacific Business Review*, pp. 19-27, Recuperado de: <https://ssrn.com/abstract=1591331>.

Kechagias, K. (2011). *Teaching and assessing soft skills*. Thessaloniki (Neapolis): 1st Second Chance School of Thessaloniki, as part of the Measuring and Assessing Soft Skills (MASS) project.

Mangrulkar, L., Whitman, C. V., & Posner, M. (2001). *Enfoque de habilidades para la vida para un desarrollo saludable de niños y adolescentes*. Washington, DC: Organización Panamericana de Salud. McMillan, J. H., & Hearn, J. (2008). *Student self-assessment: The key to stronger student motivation and higher achievement*. *Educational Horizons*, 87(1), 40-49.

McKenzie, D. (2014). *Hard measurement of soft skills*. Washington, DC: World Bank (Development Impact Blog). Basado en Groh, M., McKenzie, D. y Vishwanath, T. (2014). *Reducing information asymmetries in the youth labor market of Jordan with psychometric and skills based tests*. Washington, DC: World Bank (Annual Bank Conference on Development Economics 2014).

Miyamoto, K., Huerta, M., Kubacka, K., Ikesako, H. y Oliveira, E. (2015). *Skills for social progress: the power of social and emotional skills*. Paris: OECD, OECD Skills Studies, OECD Center for Research and Innovation (CERI) como parte del proyecto Education and Social Progress (ESP).

Raciti, P. (2015). *La medición de las competencias transversales en Colombia: una propuesta metodológica*. Recuperado del sitio de Internet Programa EUROsocial: <http://sia.eurosocias-ii.eu/files/docs/1444897404-DT34.pdf>

Singer, Marcos; Guzmán Ricardo y Donoso, Patricio. (2009). *Entrenando competencias blandas en jóvenes*, Escuela de Administración, Pontificia Universidad Católica de Chile. Recuperado de: http://www.inacap.cl/tportal/portales/tp90b5f9d07o144/uploadImg/File/PDF/Entrenando_Competicencias_Blandas_en_Jovenes.Pdf.

Rocco, T., Bliss, L., Gallagher, S. y Pérez-Prado, A. (2003). *Taking the Next Step: Mixed Methods Research in Organizational Systems*. *Information Technology, Learning, and Performance Journal*, 21(1), 19-29. World Health Organization. (2003). *Skills for Health*. Recuperado de el: http://www.who.int/school_youth_health/media/en/sch_skills4health_03.pdf.