"Service-learning in MBA programs in South Africa"

AUTHORS	Teresa Carmichael Rasoava Rijamampianina b https://orcid.org/0000-0002-4631-4801
ARTICLE INFO	Teresa Carmichael and Rasoava Rijamampianina (2008). Service-learning in MBA programs in South Africa. <i>Problems and Perspectives in Management</i> , <i>6</i> (4)
RELEASED ON	Thursday, 18 December 2008
JOURNAL	"Problems and Perspectives in Management"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



© The author(s) 2024. This publication is an open access article.



SECTION 3. General issues in management

Teresa Carmichael (South Africa), Rasoava Rijamampianina (South Africa)

Service-Learning in MBA programs in South Africa

Abstract

The purpose of this exploratory study was to determine whether there would be perceived value in implementing Service-Learning as a pedagogy into MBA programs in South Africa. This method of teaching has never been implemented in this context, yet the literature suggests that it is one of the most effective management development tools available to educators.

A mixed methodological action-research approach was taken. Perspectives were obtained from business leaders and managers, MBA students, Service-Learning practitioners and community organizations, and the synthesis of the insights obtained here are offered to the field of management education.

It was established in this study that the MBA students experienced real workplace learning, while the outputs of the work that they conducted through their academic assignments were utilized productively by most of the community organizations with which they worked. Students reported high levels of personal growth and an increased awareness of the socio-economic fabric of the country.

Although the findings from this research cannot necessarily be generalized to all MBA programs in South Africa, they do suggest that Service-Learning may have a role to play in educating South African managers whilst addressing social, economic and educational transformation needs, and that further research into this pedagogy could be warranted.

Keywords: MBA, management education, management development, Service-Learning, community service, NGO, NPO. **JEL Classification:** M10/M14.

Introduction

Organizations send their managers to do MBAs for the better performance they are expected to achieve back at the workplace, which in turn is expected to lead to better business performance. Managers sacrifice a great deal in terms of their personal, social and business lives to go through the pain of getting their MBAs because of the increased financial and non-financial rewards they hope to receive as a result of their improved workplace performance (Carmichael & Sutherland, 2005). Such progression should typically be based on performance and not simply on completing a qualification or acquiring new knowledge and skills. The practical workplace experience in an authentic workplace context gained through Service-Learning is aimed ultimately at improving performance. The pedagogy has been defined as:

"... a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs, and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility".

(Bringle & Hatcher, 1995, cited in Lazarus et al., 2000)

The process model (Figure 1) proposed by Carmichael & Sutherland (2005) illustrates the progression of the student through their MBA degree by the educational institution.

As students progress through the system, they are exposed to different teaching methods such as lecturing, case teaching, interactive debates and class discussions (Carmichael & Sutherland, 2005) and assessments, through which they build their management competence. By applying their greater skills, knowledge and ability to implement strategies in differing contexts (applied competence), they are expected to show improved performance as measured by institution-specific criteria, which in turn leads to increased financial and non-financial rewards. Both the costs and the benefits of undertaking their MBA are shown in Figure 1.

The potential role of Service-Learning in building management competence fits into the circle of learning methodologies; although in its infancy in South Africa, it has been practiced widely in the USA since the early 1970s (Bringle & Hatcher, 1995, cited in Lazarus et al., 2000). Service-Learning is different from other forms of experiential learning as the outputs of the students' work can make a real difference to organizations in the non-profit sector.

 $[\]ensuremath{\mathbb{C}}$ Teresa Carmichael, Rasoava Rijamampianina, 2008.

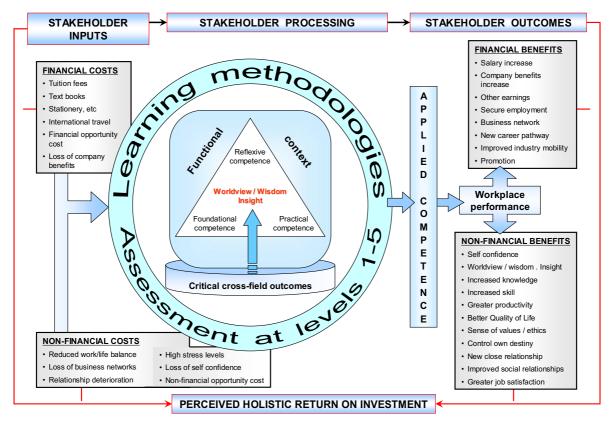


Fig. 1. A transformation process model of the MBA process (Carmichael & Sutherland, 2005)

1. The economic basis for Service-Learning

The South African economy has long demonstrated structural unemployment, resulting partly from a skewed distribution of skills and qualifications (Fields, 2000), keeping the country in a state of poverty and inequality (DTI, 2006). The slow rate of economic growth has been blamed on many factors, including the country's inefficiency (Thomas, 2005) and a lack of ethics and governance within both the government and the corporate sector (Luiz, 2006).

The informal and small business sectors in the form of Small, Medium and Micro Enterprises (SMMEs), play a large role on the South African economy (DTI, 2006; STATSSA, 2005), presenting numerous opportunities for employment (Benton, 2005). Other small organizations relevant to the viability of many communities also provide employment opportunities and include community organizations of various types, such as non-profit organizations (NPOs) and non-governmental organizations (NGOs). These organizations can benefit from skills development in many areas relating to management and entrepreneurship, enabling them to function more effectively within the communities in which they operate. This improved performance is aimed at facilitating engagement in viable business activities, providing employment, making local economic participation possible and addressing, even if only to a small extent, local poverty. The facilitation of such meaningful, sustainable community performance (Stacey,

Rice & Lange, 2001), is fundamental to Service-Learning.

The basic principle of Service-Learning in the context of this study is that of developing capacity and building community organizational performance through student intervention in the role of consultants (Kenworthy U'Ren, 2000; Jones, Woods, Coles & Rein, 2001) to that organization. Student interventions could take place in any functional field of management, such as assisting with strategic planning, project management or organizational development.

In studies conducted internationally, Learning implemented in graduate education in various disciplines resulted in better skills development compared to those who did not participate in such activities (Eyler, Giles, & Braxton, 1997). These skills fell into the categories of both functional skills, such as leadership development (Althaus, 1997), collaborative teamwork, critical and systems thinking, information literacy and problem solving (Griffith, 1999), as well as what may be termed "soft skills". These include a greater awareness of the needs of communities outside of their own, an assessment that the communities in which they had worked received real value, and that they experienced valuable inter-cultural interactions (Chesler & Vasques Scalera, 2000). Many students have reported that they felt that they had made a difference (Wade & Yarborough, 1997, p.

214). Service learning not only met their course objectives but they also achieved "more sophisticated learning ... through application, constructive critique and synthesis".

Service-learning is far more than community service or Corporate Social Responsibility (CSR), which tends to imply "giving to" or "doing for" a community. Service-learning is about teaching a community how to fish rather than giving them a fish. It's about building community performance as well as manager performance. By doing that, each organization could make a contribution towards stimulating even a little additional economic activity, which will ultimately result in a better business environment for the benefit of all.

Service learning has been implemented widely (although only recently in South Africa) in various forms. Berry & Chisholm (1999) describe Service-Learning initiatives in 33 countries around the world. Other research highlights the application of service learning in 30 institutions from nine Asian countries (International Christian University, 2002), in the Americas, Asia and Western and Eastern Europe (Chisholm, 2003), in Mexico (Espinoza, 2001), the United States (Reardon & Lohr, 1997; White & Ramaley, 1997; Stanton, 2000) and in Botswana, Costa Rica, Ghana, Indonesia, Israel, Mexico, Nepal, Nigeria, and the United States (Perold & Omar, 1997; Perold, 1998).

2. Theories of adult learning and Service-Learning

It is likely that Service-Learning produces such powerful results because it follows the basic principles of adult learning as described over the years by a number of well-known educational authors (Kolb, Ruben & McIntyre, 1971; Knowles & Holton, 2000; Honey & Mumford, 1992; Margolis & Swan, 1999; Kuh, 2003), by being structured, active, collaborative and has real-life contextualized application.

Adults learn best by doing (McMillan, 2000), and Service-Learning provides a totally action-based learning approach combined with the important element of reflection, which Kolb et al. (1971) have always considered an essential part of "closing the loop" in adult learning. Unfortunately, most of the more commonly applied pedagogies employed in educational institutions (such as lectures) do not create space for this important element. Thus learning by Service-Learning becomes more embedded within the student, they perform better back in their own workplaces, in turn leading to improved, sustainable organizational performance. Performance should be measured as actual outcomes versus targeted outcomes. Mager & Pipe (1997) provide a

model that clearly differentiates between competence and performance, as shown in Figure 2.

Competence is the ability to perform a specific task (Mager & Pipe, 1997) or achieve a specific outcome, whereas performance relates to the achievement of business results in the workplace. The Mager & Pipe model (1997) shown in Figure 2 makes two points clear: that not all performance discrepancies are due to lack of competence, and that competence does not necessarily lead to performance, common impediments being organizational obstacles and lack of effective management.

It could be said that performance is the *application* of competence in the absence of organizational (such as lack of resources) (Mager & Pipe, 1997) or personal (Hersey, Blanchard & Johnson, 1996) barriers (such as lack of motivation), which leads to the achievement of organizational objectives.

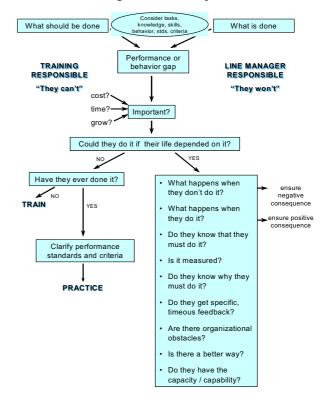


Fig. 2. Individual workplace performance model (Mager & Pipe, 1997)

Note: Adapted from Mager, R.F. & Pipe, P. (2007): *Analyzing Performance Problems*, third edition, The Centre for Effective Performance, Inc.

In this context, it is anticipated that MBA students who experience Service-Learning will be more competent managers and leaders, which in turn, will enable their employer organizations to perform at a higher level. It is also anticipated that recipient community organizations will perform at sustainably higher levels as a result of the student interventions.

3. Methodology

Service-Learning was incorporated into two MBA courses (Organizational Design and Development) in order to collect the data reported on here. The knowledge claims of action research rest on assumptions that knowledge is uncertain and its creation (not discovery) is collaborative, is created through a process of trial and error and leads to provisional rather than absolute answers (Bless & Higson-Smith, 2004; McNiff & Whitehead, 2006). This made it an ideal approach to take in building competence for delivering a Service-Learning course.

McNiff & Whitehead's (2006) description is similar to that of Creswell's (2003) advocacy/participatory paradigm, which is focused on bringing about change in practices. Creswell (2003) further describes the practical, collaborative nature of research of this type in that the inquiry is conducted *with* others, rather than *to* or *on* others, and the developmental process of the research is iterative and evolutionary.

The approach in this research was based on the student-as-consultant model (Kenworthy U'Ren, 2000; Jones et al., 2001), where students undertook their assignments within a community organization such as a non-governmental (NGO) or non-profit organization (NPO). The objective was to take the role of consultants to that organization, on the assumption that the organization would not normally be able to afford such a consultant, to conduct a needs analysis, deliver an appropriate intervention and/or report to that organization, building organizational competence as part of the process. The intervention also needed to be within the remit of the requirements of the ODD course. Building a level of competence was essential to assure sustainability of the learning derived from the intervention.

"Because of its connection with the world of work and citizenship, Service-Learning has much to contribute to sustainable communities".

(Albert, 2002, p. 2)

The students' academic submissions were: a) an account of their curriculum-based learning by relating their practical experiences to the theoretical foundations of the course; b) a structured reflective journal (Bringle & Hatcher, 1999) describing their academic and personal development as a result of their experiences; and c) a presentation to the rest of their class describing their intervention, their learnings and feedback from the community organization they had worked with. They also completed an existing questionnaire (Bender, Daniels, Lazarus, Naude & Sattar, 2006) evaluating their experiences and perceptions of their own and the community organizations' learnings and benefits.

The sample consisted of all MBA students taking the ODD course as part of their MBA program at the Graduate School of Business Administration at the University of the Witwatersrand, Wits Business School (WBS) during 2006; one full-time and one part-time class were included (n = 72). Data were also collected from the business community (n = 142) to establish their expectations of MBA graduates, providing a baseline on which to evaluate the effectiveness of the program, and the community organizations (n = 25) with whom the students worked.

4. Results and discussion

The expectations of the business community regarding MBA graduates revealed that they not only had expectations that students would be able to perform functional tasks such as finance, marketing and human resources, but that they were also expected to have a number of generic skills, and it was on these skills that greater emphasis was placed. The view was that the functional aspects were "a given", whereas the generic skills were more indirect and subtle, more difficult to measure, but were ultimately the ones that underpinned a manager's success.

Figure 3 illustrates the generic skills identified by business executives as critical to business success, presented by importance as reflected by a weighting factor.

It would clearly be desirable to see as many of these skills as possible developed through Service-Learning, preferably to a greater extent than other pedagogies. Such a comparison was not part of this study, but would clearly be a recommendation for further research, since Service-Learning has not been implemented in MBA programs in South Africa other than in this case.

The analysis of the students' Likert scale questionnaires revealed that they self-perceived that they had developed the skills identified by the business executives in Figure 1 to varying degrees. The data were rescaled and analyzed (alpha = 0.05) using Stacey's (2005) Distribution Fitting Algorithm (DFA) to reveal that the development of 'Working with others', 'Problem solving' and 'Self management' was significantly (p = 0.01) higher than that for the other generic skills. These three rank towards the higher end of generic skills required in the business environment. Thus the generic competencies that the students acquired align with those required to be an effective manager.

The community organizations identified the skills they required to run their organizations effectively and that needed development as shown in Table 1.

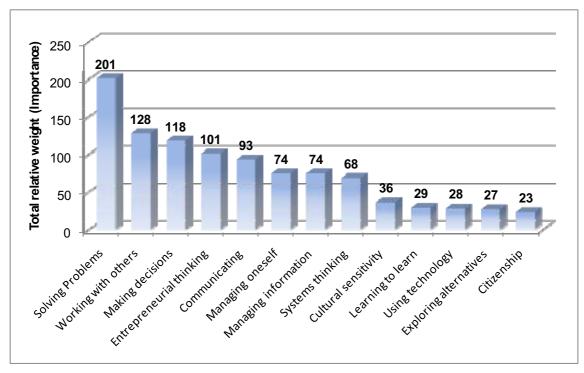


Fig. 3. Generic skills ranked by importance as identified by business managers (n = 142)

Table 1. NPO/NGO Skills needed to be developed in order to run their organizations effectively sorted by number of times mentioned

Primary skills needed to run the organization	N: skills needing development	%
HR management: team-building, performance management, change management, conflict resolution	8	13.8
General management	7	12.1
Accounting, financial planning and financial management	5	8.6
Marketing	5	8.6
Strategic planning	4	6.9
Leadership and governance	4	6.9
Project management	4	6.9
Fund raising	4	6.9
Administration	3	5.2
Event management	3	5.2
People skills and communication	3	5.2
Creativity	2	3.4
IT skills including web design	2	3.4
Professional skills in specific areas, e.g. medical, child care, electrical, agriculture, woodwork	2	3.4
Operations management	1	1.7
Writing: technical, creative	1	1.7
TOTAL	58	

The students undertook projects mainly in line with these identified areas (as requested by the organizations involved), mainly in facilitating general and strategic planning (64% of interventions) and teambuilding (20% of interventions) sessions. The projects were geared around the academic requirements for the ODD course, and lecturer assessment of the interventions was that they were fair to good in 90% of cases (on a five point scale of very poor, poor,

fair, good and very good). Reports from the organizations that the students worked in were also positive with regard to the effectiveness of the interventions, as shown in Table 2.

Table 2. NPO/NGO responses to direct questions regarding the student interventions

Direct query	Responses
Did you (the community organization) benefit from the student Service-Learning intervention?	Yes = 20 Partly = 5 No = 0
Are you able to use the advice/tools that resulted from the intervention?	Yes = 15 Partly = 4 To board = 6 No = 0
Should Service-Learning take place/continue in business schools?	Yes = 18 Didn't say = 7 No = 0

In some cases, the ideas or tools developed are needed to be approved by the Board before implementation, but overall, the NPOs and NGOs did perceive that they benefited from the students' work and indicated that Service-Learning projects should be continued at business schools.

The students themselves overwhelmingly rated their interventions as successful, and also showed a significantly (p = 0.01) positive response regarding their own learning. These data were gathered using the Likert scale questionnaire referred to earlier, and once again analyzed using Stacey's (2005) DFA. They also stated that the Service-Learning course was **not** more time consuming than the other courses they had attended on the MBA program, but about the same.

When questioned on their overall learning experience, the students' responses were content analyzed to produce the general themes described in Table 3, presented in order of frequency.

Table 3. Students' (n = 72) themed responses to their overall learning experience

Overall learning experience and new learnings	
Empathy for and awareness of the wider society in SA & those less fortunate.	25
ODD skills (both theory and practice); gave much greater insight into a difficult/abstract topic.	16
The great importance of the role played by NGOs and NPOs and that they are businesses too.	12
Communication skills including listening and story telling as a tool.	10
Development of real team work ability and getting best from others in the group, even though there was often conflict – we just had to	
deal with it.	10
A really great way of learning – I learnt a lot about myself as well.	10
Appreciation for one's own fortunate situation.	10
Gained new perspectives on how businesses operate (generally) and how to work with and in them.	8
Other business skills: strategy, project management, learning to learn in a real work environment, presentation skills.	6
I can personally make a difference.	5
Businesses have a responsibility to society.	4
Diversity and culture awareness.	4
Changed attitude/mindset.	3
"None"	1

Many of the MBA students, on returning to work as managers continued their involvement in projects with the community organizations they worked with in the ODD course. This could be a reflection of the high level of personal growth experienced by the students. This was accompanied by an appreciation of the work of community organizations, as well as sensitivity to the poverty affecting the majority of South Africans. It is possible that many of them will initiate and/or sustain CSR and CSI projects within their organizations. Should they do so, they will be contributing further to growth and development in South Africa.

Mintzberg (2006) has examined the implementation of skills development programs in developing countries and questions whether Western management and leadership practices are effective in these contexts. The findings from this study suggest that it is possible for such Western interventions to succeed, although it was modified to suit local circumstances. An important fact contributing to this could be that MBA students in South Africa are experienced and/or practicing managers. This fact is of great importance to Mintzberg (2004a, 2004b, 2004c, 2004d) himself, in his belief that managers can only truly develop in the workplace, not in the classroom.

These findings also suggest that there is great potential to improve teaching and learning practices in MBA degrees, overcoming some of the published shortcomings of MBA education, such as lack of practicality (Boyatzis et al., 1995), narrow focus (Porter & McKibbin, 1988; Godfrey, Illes & Berry, 2005) and teaching the wrong competencies (Mintzberg, 2004a).

In South Africa, MBA degrees are professional, not academic qualifications, and it is hoped that the pragmatic approach taken in this study will not compromise its potential contribution to an improvement, of whatever magnitude, to the quality of life of South African and citizens of other developing countries.

Conclusion and recommendations

Because management education in general and MBAs in particular have been strongly criticized for their lack of practicality and narrow focus on functional competencies only (Porter & McKibbin, 1988; Boyatzis et al., 1995; Mintzberg, 2004a), business schools should actively adopt pedagogies such as Service-Learning, for the opportunities and benefits provided. They should also integrate the teaching of generic competencies into MBA programs, which have been found to be important management competencies, both in this and earlier studies (Carmichael & Sutherland, 2005).

References

- Albert, L. Information Literacy and Service-Learning // A discussion led at a meeting of the National Forum of Information Literacy on May 17 in Washington, DC, 2002, accessed 27 April 2004 from http://www.infolit.org/meetings/summary_May2002.html.
- 2. Althaus, J. Service-Learning and Leadership Development: Posing Questions, Not Answers // Michigan Journal of Community Service Learning, 1997. 4. pp. 122-129.
- 3. Bender, C.J.G., Daniels, P., Lazarus, J., Naude, L. and Sattar, K. Service-Learning in the Curriculum: A Resource for Higher Education Institutions. Pretoria: The Council on Higher Education, 2006.
- 4. Berry, H.A. & Chisholm, L.A. Service-Learning in Higher Education Around the World: An Initial Look. New York: International Partnership for Service-Learning, 1999.
- 5. Bringle, R. and Hatcher, J. Reflection in Service-Learning: Making meaning of Experience // Educational Horizons, 1999.—Summer, pp. 179-185.
- 6. Bringle, R.G. & Hatcher, J.A. A service-learning curriculum for faculty // Michigan Journal of Community Service Learning, 1995. 3. pp. 112-122, cited in Lazarus et al. Community Service in Higher Education // A

- document prepared for the SAQA Board sub-committee on community service in higher education, June, Johannesburg: Joint Education Trust. 2002.
- 7. Carmichael, T. & Sutherland, M. A holistic framework for the perceived return on investment in an MBA // South African Journal of Business Management, 2005. 36 (2). pp. 57-70.
- 8. Chesler, M. & Vasques Scalera, C. Race and Gender Issues Related to Service-Learning Research // Michigan Journal of Community Service Learning, 2000. Special Issue, Fall. pp. 18-27.
- 9. Chisholm, L. (Ed). Knowing and Doing // a collection of papers presented at the International Partnership for Service-Learning held in Prague, 2002. 2003.
- 10. Creswell, J.W. Research design: Qualitative, Quantitative and Mixed Methods Approaches, 2nd Edition, Sage Publications, London. 2003.
- 11. DTI, (2006) South African Labour Market: International benchmarking against selected economies // Research Report, 2003. Pretoria: Government Printer.
- 12. Espinoza, E.L. Introduccion a los problemos socials de Mexico. Guadalajara, Mexico: Folia Universitaria, 2001.
- 13. Eyler, J., Giles, D.E. Jr., & Braxton, J. The Impact of Service-Learning on College Students // Michigan Journal of Community Service Learning, 1997. 4. pp. 5-15.
- 14. Service-Learning // Academy of Management Learning and Education, 2005. 4 (3). pp. 309-323.
- 15. Fields, G. The Employment Problem in South Africa // keynote address presented at the TIPS 2000 Annual Forum at Glenburn Lodge, Johannesburg, (18-20 September), 2000. Trade and Industrial Policy Secretariat.
- 16. Griffith, W. The Reflecting Team as an Alternative Case Teaching Model: A Narrative, Conversational Approach // Management Learning, 1999. 30 (3). pp. 343-362.
- 17. Hersey, P., Blanchard, K.H. & Johnson, D.E. Management of Organizational Behaviour: Utilizing Human Resources, Seventh edition, 1996. New Jersey: Prentice-Hall International, Inc.
- 18. Honey, P. & Mumford, A. The Manual of Learning Styles, third edition, 1992. Maidenhead: Peter Honey.
- 19. International Christian University. Service Learning in Asia: Creating Networks and Curricula in Higher Education // Conference Proceedings from the Conference of the International Christian University, July 2002. Tokyo.
- 20. Jones, A., Woods, A., Coles, A-M., and Rein, M. Graduates as strategic change agents in small firms: a case study of graduate placements and lifelong learning // Strategic Change, 2001. 10 (1). pp. 59-69.
- 21. Kenworthy-U'Ren, A. L. Management Students as Consultants: A Strategy for Service-Learning in Management Education, in Working for the Common Good: Concepts and Models for Service-Learning in Management, 2000. G.G. Godfrey and E.T. Grassso (eds), Washington, DC: American Association for Higher Education.
- 22. Knowles, M.S. & Holton, E.F. The Adult Learner: The Definitive Classic on Adult Education and Training, Fifth edition, 2000. Woburn: Gulf Publishing Company.
- 23. Kolb, D.A., Rubin, I.M. & McIntyre, J.M. Organizational Psychology: An Experiential Approach to Organizational Behaviour, Fourth edition, 1971. New Jersey: Prentice Hall.
- 24. Kuh, G.D. What We're Learning About Student Engagement from NSSE // Change, 2003. 35 (2). pp. 24-33.
- 25. Luiz, J. Challenges and prospects for economic and business development in Africa, in Luiz, J. (ed) 2006. Managing Business in Africa, Cape Town: Oxford University Press South Africa.
- 26. Mager, R.F. & Pipe, P. Analyzing Performance Problems, Third edition, 1997. Atlanta: The Centre for Effective Performance, Inc.
- 27. Margolis, F. and Swan, B. A Trainer's Handbook for Participative Learning, 1999. Massachusetts: HRD Press.
- 28. McMillan, J. Service Learning as Experiential Learning: Bringing the 'Community' into Higher Education, a paper presented at the Council for Higher Education (CHED), 2000. UCT: Advanced Research Seminar, 24 May 2000.
- 29. McNiff, J. and Whitehead, J. All you need to know about Action Research, 2006. London: Sage Publications.
- 30. Mintzberg, H. Managers not MBAs, 2004a. San Francisco: Berrett-Koehler Publishers, Inc.
- 31. Mintzberg, H. Third generation Management Development // Training & Development, 2004b. 58 (3). pp. 28-37.
- 32. Mintzberg, H. Leadership and management development: an afterword // Academy of Management Executive, 2004c. 18 (3). pp.140-142.
- 33. Mintzberg, H. The MBA Menace // Fast Company, 2004d. 83. pp. 31-32.
- 34. Mintzberg, H. Developing Leaders? Developing countries? // Development in Practice, 2006. 16 (1). pp. 4-25.
- 35. Perold, H. & Omar, R. Community Service in Higher Education: A Concept Paper, 1997. Johannesburg: Joint Education Trust.
- 36. Perold, H. Community Service in Higher Education: Final Report, 1998. Johannesburg: Joint Education Trust.
- 37. Porter, L.W. and McKibbin, L.E. Management Education and Development: Drift or Thrust into the 21st Century? 1988. New York: McGraw-Hill Book Company.
- 38. Reardon, M.F. & Lohr, J. The Urban Research University in American Higher Education: Portland State University as a Model // Journal of Higher Education (Hokkaido University), 1997. Special Edition.
- 39. Stacey, A.G. Reliability and Validity of the Item Means and Standard Deviations of Ordinal Level Response Data // Management Dynamics, 2005. 14 (3). pp. 2-25.
- 40. Stacey, K., Rice, D.L. and Lange, G. Academic Service Learning: Faculty Development Manual, Second edition, 2001. Ypsilanti: Eastern Michigan University.
- 41. Stanton, T.K. Linking Service with Academic Study: Stanford's Lessons in Service-Learning, a lecture delivered at Vanderbilt University on February 10th. 2000.
- 42. STATSSA Survey of Employers and the Self-Employed, Statistical Release P0276, 2005. Pretoria: Statistics South Africa.

- 43. Thomas, S. SA's competitiveness: more productive but not efficient // Financial Mail, 20/05/2005. pp. 57.
- 44. Wade, R.C. & Yarborough, D.B. Community Service Learning in Student Teaching: Toward the Development of an Active Citizenry // Michigan Journal of Community Service Learning, 1997. 4. pp. 42-55.
- 45. White, C.R. & Ramaley, J.A. Institutional Transformation as Scholarly Activity: The Experience of Portland State University // Journal of Higher Education (Hokkaido University), 1997. Special Edition.