BEST: International Journal of Humanities, Arts, Medicine and Sciences (BEST: IJHAMS) ISSN (P): 2348-0521, ISSN (E): 2454-4728 Vol. 7, Issue 1, Jan 2019, 17-28 © BEST Journals



THE WORKING ENVIRONMENT, STUDENT PERFORMANCE, AND

UNIVERSITY CURRICULA: A CASE OF SOCIAL

ECOLOGY IN ZIMBABWE

MANASA SIBANDA¹, ALBERT MAKORE², CLAY H. BASERA³, LEONARD I. CHIRENJE⁴ & CHENGETAI DIANA MANHANZVA⁵

^{1,4}Department of Sociology and Social Anthropology, Julius Nyerere School of Social Sciences, Great Zimbabwe University, Masvingo, Zimbabwe

^{2,3}Munumutapa School of Commerce, Great Zimbabwe University, Masvingo, Zimbabwe ⁵Department of Agricultural Economics, University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe

ABSTRACT

The importance of iterative learning has been considered in institutions of higher and tertiary learning worldwide. The study establishes linkages of the work environment, student performance, and the university curricula. It explores the influences of Work-Related Learning on curriculum development, particularly looking at the Social Ecology programme offered by the Great Zimbabwe University. It captures experiences and perceptions of students, work and academic supervisors, on the applicability of classroom learning and practical exposure in the workplace settings. Emphasis is given to the relevance of modules taught in the Social Ecology discipline, curriculum reviews made, challenges experienced as well as the performance of students in their final year of study. Both qualitative and quantitative data gathering techniques were adopted. These allowed triangulation of data in order to ensure that concepts on the applicability of curriculum development, perception of students and lecturers as well as the impact of placement, would be explored fully. A target population of 500 final year students from Social Ecology was considered for the research. A total of 110 assessment forms filled in by the work and the academic supervisors were used for data analysis. The four members of staff in the department were interviewed as key informants. They provided detailed data on how information derived from the surveys were translated into reviews on the curriculum. Various secondary sources were also consulted. The study revealed that the expectations of work supervisors directly influenced the designing of the university curriculum as well as the module content to include contemporary issues. The implications of the research are that curricula need to be changed in line with industry requirements by including practical software packages that were used in industry such as Geographical Information Systems in environmental assessments and Statistical Package for Social Scientists(SPSS) for data analysis.

KEYWORDS: Work -Related Learning, Student Performance, Social Ecology & Curriculum

INTRODUCTION AND BACKGROUND

The importance of iterative learning has been considered in institutions of higher and tertiary learning worldwide. This has been partially achieved through Work Related Learning (WRL), whereby students are placed to relevant and approved workplaces to acquire requisite skills and experience. WRL is also known as industrial attachment, attachment or work placement. The Great Zimbabwe University has, in all its undergraduate degree programmes, incorporated WRL.

This component is taken during the third year of study for a minimum of ten (10) months to a maximum of twelve (12) months. Its purpose is to expose the students to the practical world of work (GZU, 2014 unpublished). Operationally, the student works with a mentor at the place of attachment and an academic member in the department. In particular, the students are anticipated to develop appropriate team spirit and adhere to the core values of the organizational objectives. Additionally, they have an opportunity to handle different tasks in the different departments in a working environment thereby developing the student a repertoire of skills necessary for working in a multi-operational organization.

WRL is examinable. Assessment of the students by academic supervisors looks at areas of relevance from the workplace that could be incorporated into the curriculum, the applicability of their theoretical knowledge and what they would have gained (including the use of technologies). Realizing that not only the classroom learning suffices for a graduate, but other areas of competencies are also considered and assessed, which include leadership qualities, ability to solve problems, business competencies, interpersonal skills development, conduct, and general behavior. Work by the Commission of the European Communities (2006) and Seikkula-Leino, Ruskovaara, Ikavalko, Mahila and Rytkola(2010), stressed the need to foster entrepreneurial education in higher and tertiary institutions with the specific aim to encourage entrepreneurial development, skills, and awareness. Although WRL is argued to be at the center of linking the main goal of developing the mind and the skills of a learner, it is therefore imperative to look at the extent to which it also influences the development of curricula in the social ecology discipline.

Objectives of the Study

This study explored the extent to which WRL influenced the curriculum development of the social ecology programme. It captured experiences and perceptions of students, work supervisors and academic supervisors on WRL as well as the applicability of classroom learning to practical exposure in a working environment. Emphasis was given to the relevance of modules taught in social ecology programme in the department of sociology and social anthropology, curriculum reviews made, challenges experienced as well as the overall WRL performance of final year students.

METHODOLOGY AND DATA ANALYSIS

To ascertain the applicability of curriculum development, a perception of students and lecturers as well as the impact of WRL, a mixed method approach was adopted as appropriate for the study. Both qualitative and quantitative data collecting methods were utilized in the study. Social Ecology students from the Department of Sociology and Social Anthropology were purposively sampled for the research. From a total population of 500 students in the department, a total of 55 registered students for Social Ecology were selected. Assessment forms that were filled in by the Work Related Learning supervisors and the Academic supervisors were captured for data analysis. A total of 110 assessment forms were used. During the WRL assessment visits, the Work supervisors were interviewed to capture their perceptions on curriculum development for the Social Ecology subject area. The four members of staff in the social ecology subject area were interviewed as key informants. These provided detailed data on how information derived from the surveys were translated into reviews on the curriculum. Various sources of documented data were consulted as secondary sources. These include scholarly articles on databases on the web, books in the library, WRL reports (by supervisors and students) and minutes of meetings by the Social Ecology subject area.

Quantitative data were analyzed using SPSS version 16 and MS Excel. For qualitative data, the Miles and Huberman's framework of 1994 was considered to be ideal. It allowed the tracing of the relationships among WRL

experiences and perceptions phenomenon on curriculum development by students as well as academic and work supervisors, based on the regularities and sequences that link these. The study applied the three interactive components of the framework which are data reduction, data display and drawing, as well as verifying conclusions. This allowed for descriptive analysis of data.

Ethical Considerations

After the recommendations of the departmental and school research and ethical committees, the study was approved. The aim and objectives of the study which was for academic purposes only were shared with prospective respondents. Consent from respondents was sought prior to the commencement of the study. Furthermore, respondents were free to participate in the study. Assurance on anonymity was given to all respondents.

CONCEPTUAL FRAMEWORK

A conceptual framework shows the various relationships between the variables in a research study (Altinay and Paraskevas, 2008). One of the theories which explain the concept of work-related learning is the Grand Trinity Theory by Booker T. Washington (1986). The Grand Trinity Theory stresses the idea that complete education should integrate the mind, the heart and the hand. The focus of the theory is to achieve a self-reliant and self-supporting learner, cultivate the value of work and promote economic freedom and self-sustenance. The underlining factors of the theory sought to link theoretical aspects of learning and on the job applications through cognitive learning, affective learning and psychomotor learning (Siyakwazi, 1986). This study assessed how students were able to articulate the theoretical aspects of Social Ecology and applications of cognitive, affective and psychomotor learning in the working environment. As such, the study shall be able to identify the gaps and how the subject area was able to incorporate these into the curriculum.

The other theory which gave an in-depth understanding of the relevance of work-related learning is Bloom's Taxonomy of Learning Domains. The three domains of learning according to Bloom, Engelhart, Furst, Hill, and Krathwohl(1956) are cognitive knowledge, affective component which deals with feelings or emotions of learners and psychomotor skills which deal with practical work. In higher and tertiary education, the curricula deal with a theory which develops the mind as well as the affective component in a learner. The psychomotor skills are enhanced through work-related learning which exposes the learner to the practical aspects of learning. The Taxonomy of Learning Domains theory informs the study in identifying how psychomotor skills are enhanced and areas that need to be strengthened in the classroom for students to effectively perform in the working environment.

LITERATURE REVIEW

In the Zimbabwe prefecture, curriculum development in institutions of higher and tertiary learning has been a process, which involved a multiplicity of stakeholders. This was on the premise that curriculum cannot remain static, must be responsive to changes in society and the economy, and changes in the nature of learning itself. In response to dynamic political and economic environments, universities embarked on reviewing curriculum on a continuous basis. Similarly, special interest groups such as religious bodies, Non-governmental Organizations (NGOs), professional organizations, private companies, and trade unions had a direct influence on institutions of higher learning to adopt contemporary issues in their curriculum. To embrace both internal and external interests, the enshrinement of Work Related Learning was made to be part of curriculum development by universities.

Day(2010:7) defines WRL as "planned activities that use the context of work to develop knowledge, skills, and understanding useful in work, including learning through the experience of work, learning about work and working practices, and learning the skills for work". Assumptions for WRL are that all workplaces are relevant and will build on the knowledge base of the students (Cornford, 2002). As such, students are expected not only to partake work activities that are related to their areas of study but at the same time exposes them to other areas of work by the employer. Similarly, it assumes that the amount of time allocated to these tasks is balanced in order for the student to apply theory to practice as well as develop other skills during attachment.

There are mutual benefits accruing among students, the workplace/employer and the university from WRL. Work by a number of scholars summarizes these as follows,

- Students will have an increased chance to be employed in the relevant industry, gained requisite skills (including interpersonal) and use of technology, provide feedback to the institution on gaps to consider in reviewing curricula as well as improved academic performance (Makuvaro, 2015, Lerman, 2014, Stanbury et al., 2009, Matamande et al., 2008, Mendez, 2008, Mihail, 2006, Gomez et al., 2004 and Brown, 2002).
- In the long term, the university becomes a repository for highly employable graduates who would have undergone curricula that address contemporary issues and prepare them for future challenges (GZU WRL Guide, 2012, The Work-related Learning Guide, 2008).
- Employers tend to recruit those students who have a working background (Edziwa and Chivheya, 2013).
- In terms of the employer, Holzer et al., (2014) are of the opinion that the relevant industry will recruit graduates who were exposed to the working environment.
- WRL provides linkages for strong partnerships for collaboration between universities and employers (GZU WRL Guide, 2012).

A number of challenges have been observed regarding WRL. Brown (2002), Makuvaro et al., (2015), Matande et al., (2008), infer that students on WRL form a pool of "cheap labor" due to the amount of workload and the level of remuneration or lack of it.

STATEMENT OF THE PROBLEM

A number of research studies have concentrated on the performance of students on WRL and challenges encountered however there is a gap in looking at how effective it has contributed to curriculum development in the social ecology subject area. The advent of the dynamic socioeconomic and political environment in Zimbabwe led to significant decline in private sector investment, increased the unemployment rate, inflation and an overwhelming increase in the number of university graduates has exacerbated the ability of students to be attached to places of work. In some cases, secured places are not directly related to areas of specialization particularly for human resources management students (Mashavira et al, 2014). While this dynamic situation prevails, institutions of higher learning were involved in reviewing the curriculum in order to produce competitive graduates. Thus, this study looks at how experiences and lessons derived from the WRL programmes can be used to influence curriculum development in the social ecology.

FINDINGS

This section provides the results of the study. These are presented in themes developed from the research questions and other research instruments used.

Composition of Students by Gender

The study drew respondents from all (55) students of both sexes in the final year of the BSc Honours degree in Social Ecology programme at the Great Zimbabwe University. This completed WRL in their third year (Part 3), of study. Table 1 below, summarizes the composition of students by gender.

Table 1: Composition of Final Year Social Ecology Students 2016

Student Year of Study	Male	Female	Total
Part 4 semester 1	18	20	38
Part 4 semester 2	8	9	17
Grand Total	26	29	55

Table 1 above shows that the majority of the students (53%) were a female while(47 %) were male.

Types of Employers

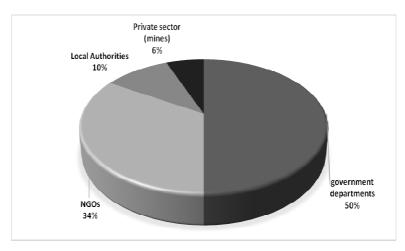


Figure 1: Types of Employers

Figure 1 above summarizes employers that offered placement to Social Ecology students during 2015 academic year. The major employers were government departments which gave placement to 50% of the students followed by Non-Government Organizations (NGO), with 34%, local authorities (town councils) constituted 10% and the least 6% being the private sector. The government departments that offered places of attachment were, the Ministry of Women Affairs, Gender, and Community Development; Environmental Management Authority (EMA); Forestry Commission; National Parks and Wildlife Authority (NPWA) and Agricultural Extension and Technical Services (AGRITEX). The Karoi town council and the Harare city councils were the local authorities that offered attachment. Respondents were attached to the following NGOs, Birds Life, Sebakwe Conservation and Education Center, Dananai Childcare (DACHCARE) and the Family AIDS Community Trust (FACT). The private sector that offered placement was at How Mine.

Major Modules Applied by Students during WRL

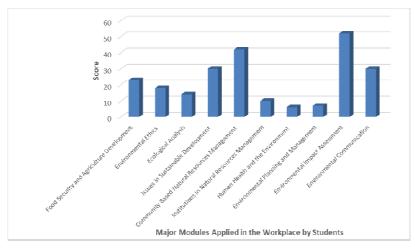


Figure 2: Major Modules Applied by Social Ecology Students on WRL

Figure 2 above, shows that the most applied module is Environmental Impact Assessment with a score of 52%, followed by Community Based Natural resources management (CBNRM) with 42%, Issues in Sustainable Development and Environmental Communication with 30% each, Food Security and Agriculture Development (23%), Environmental Ethics (14%), Institutions in Natural Resources Management (10%), Environmental Planning and Management (7%), and the least being Human Health and the Environment (6%).

The Prioritized Modules by Type of Employer

Respondents identified and ranked modules according to how they perceived as most applied in their work environment. These were disaggregated by types of employers. Table 1, presents a list of modules that were perceived as most applied during WRL.

SI. No **Module Narration** Food Security and Agriculture Development 1 2 **Environmental Ethics** 3 **Ecological Analysis** 4 Issues in Sustainable Development Community Based Natural Resources Management 5 Institutions in Natural Resources Management 6 7 Human Health and the Environment 8 **Environmental Planning and Management** 9 **Environmental Impact Assessment** 10 **Environmental Communication**

Table 1: List of Prioritized Modules

In Table 1, respondents affirmed the list of prioritized modules as most applicable in their areas of placement. Out of the 20 social ecology modules on offer for part 1 and 2, a total of 10 modules were singled out as most applied in the work environment. Respondents attached to government departments and the NGOs mentioned that modules 1, 2, 3, 4, 5, 9 and 10 were predominant in their work while those from the private sector highlighted 1, 3, 4, 5, 6 and 9. Students attached to local authorities prioritized modules 3, 7, 8 and 9 while the private sector specialized with modules 3, 6, 7, 9 and 10.

Student Performance Rating by WRL Supervisors

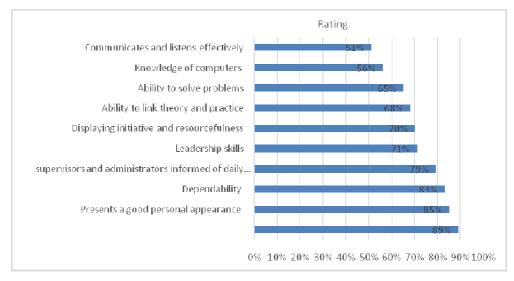


Figure 3: Student Performance rating by WRL Supervisors

Regarding the progress made by students, the supervisors from the work of placement rated students' performance highly on punctuality and enthusiasm for the WRL experience 89%. This was followed by Presents a good personal appearance (85%), Dependability (83%), Keeping supervisors and administrators informed of daily duties (79%), Leadership skills (71%), Displaying initiative and resourcefulness (70%), Ability to link theory and practice (68%), Ability to solve problems (65%), Knowledge of computers (56%), and the least being Communicates and listens effectively (51%). See figure 3.

Skills Gaps Identified by Employers

Supervisors identified four key areas, which they alluded to as gaps from the students on attachment. These were, Report writing skills, Computer skills, Geographic Information Systems (GIS) and Statistical Package for Social Scientists (SPSS), Problem -solving as well as the Ability to link theory and practice.

Student Performance Rating by Academic Supervisors

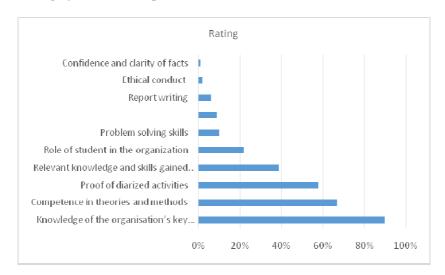


Figure 4: Student Performance Rating by Academic Supervisors

Academic supervisors from the institution, rated students' performance highly on the Knowledge of the organization's key business (90%), followed by competence in theories and methods (67%). Proof of diarized activities was rated third with (58%), Relevant knowledge and skills gained from the practical experience was forth (39%), followed by Role of a student in the organization (22%). Problem-solving skillswas(10%), while Programme Development and implementation skills (9%), Report writing (6%), Ethical conduct (2%), and lastly Confidence and clarity of facts (1%). See figure 5 above.

Skills Gaps Identified by Academic Supervisors

The study revealed that Academic supervisors identified three critical skills gaps that students lacked at their workplaces. These were Programme Development and implementation skills, Report writing, Ethical conduct, and lastly Confidence and clarity of facts.

Challenges Faced by Students on WRL

Respondents identified five major challenges in WRL. These were divided into prior to securing placement and while on the job. Students reiterated that securing a place was the major impediment they faced. They mentioned that this was due to competition with students from other universities and that they did not have "connections" (influential persons whom they are related to) to assist them to find placement.

While attached, all respondents affiliated to government departments affirmed that they were not receiving any remuneration, were overburdened with work from supervisors (including tasks that were not requisite to their areas of specialization), taken as sources of cheap labor especially whereby supervisors and other office bearers in the organization attended seminars as well as conferences and left the students to "do everything in the office". The situation was different for students attached to the private sector and NGOs, where allowances (transport and food), and opportunities to attend seminars and conferences were provided. The lack of information (especially operational), report writing and computer software applications (GIS and SPSS) were the major functional challenges faced by students in all sectors. Unlike in the private sector and local authorities, information and specialized training in computer software packages were offered to students during induction. These did not experience difficulties articulating to organizational operating systems.

RECOMMENDED CURRICULA CONSIDERATIONS FOR SOCIAL ECOLOGY

Work supervisors were of the opinion that students should be given training in computer usage and familiarity with basic software especially GIS and SPSS on the one hand. On the other hand, Academic supervisors revealed that inclusion of software packages in the module Ecological Analysis was important. They recommended that the GIS application component should include practical sessions and an in-class test as the priority in the module. Further analysis with respondents revealed that SPSS should be incorporated in the module Research Methods and Statistics as one of the software packages for data capturing and analysis. They also suggested that teaching of the module Communication Skills should have a more practical approach to allow students to practice use of computers, report writing, and presentation skills.

Further, it was recommended that the module Environmental Communication have an expanded topic on environmental reporting including increasing the number of assignments that improve writing skills as well as clarity of facts by social ecology students. Apart from being practical the module Monitoring and Evaluation should emphasize on

Programme Development and implementation skills to prepare students for the work environment.

DISCUSSION OF FINDINGS

This section discusses the findings of the study.

Composition of students by gender

The mixed gender composition of respondents who completed WRL provided a balanced representation of perceptions and contributions of both sexes in the study. The study established that the major employer for Social Ecology students on WRL was the government. In spite of offering placement to the majority of students, it did not provide any remuneration. Students pointed out that the departments allowed students to be exposed to all operations of the departments. That is finance, human resources management as well as project implementation divisions. This approach allowed students to be exposed to a diversity of the work environment. Due to lack of remuneration, students preferred to work for the private sector, NGOs and local authorities because they offered allowances and opportunities for training as well as attending conferences. However, students who were attached to EMA, Forestry Commission and National Parks and Wildlife Authority received allowances when they conducted fieldwork. This increased their morale and attitude towards learning in the work environment. Primrose and Alexander (2013) concur to these findings, particularly for the Zimbabwean environment. The challenging political and economic dynamics in the Zimbabwe prefecture attributes to the limited number and ability of private companies and NGOs to effectively operate and increase intake of students for WRL. Local authorities who depend mostly on rates and permits was equally affected as ratepayers were not consistently able to pay up arrears.

Out of a total of 20 social ecology modules that were offered to students prior to going on WRL, 10 were identified as most applicable to the working environment. Respondents explained that the criteria used for assessing these modules include the theories learned and overall content (number of contemporary topics). Modules with less number of topics, which were not applicable were not considered. This, however, can be subjective. For instance, it can be argued to depend on the interests of the student, cognitive style, and the type of the employer. Modules which covers content on contemporary and crosscutting issues such as Environmental Impact Assessment, Community Based Natural Resources Management and Issues in Sustainable Development were highly considered as most applicable to the working environment. Although regarded as the least two modules, Environmental Planning and Management, and Human Health and the Environment were highly applicable to the mining sector. It can be concluded that the ranking of the most utilized modules depends on the type of industry or employer.

In terms of student performance on work activities, work supervisors highly regarded operational issues compared to their ability to link theory to practice. A theory is a critical component in the application of knowledge hence the need to bring together theory and practical aspects. The merging of theory and practice is indispensably critical in developing high-level competences among learners (Bereiter and Scardamalia, 1993; Leinhardt, McCarthy and Merriman, 1995; Collin and Tynjälä, 2003; Tynjälä, Välimaa and Boulton-Lewis, 2003; Eraut, 2004; Tynjälä, Slotte, Nieminen, Lonka, and Olkinuora, 2006; Le Maistre and Paré, 2006). The tools used to collect data did not capture the educational qualification of the work supervisor. Bereiter and Scardamalia(1993) claim that students need self-regulative knowledge which is a combination of reflective and metacognitive skills. Le Maistre and Paré(2006) andTynjäläet al.,(2006) concur with what academic supervisors and work placement mentors expect in trainees that is to integrate theoretical, practical and self-regulative

knowledge into a whole. As a result of this gap, the knowledge base of the work supervisor on the appropriate theories determined the score the student earned. However, on the contrary, academic supervisors rated students' performance highly on the knowledge of the organization's key business, and competence in theories and methods. The least scores were observed in report writing, ethical conduct, and confidence and clarity of facts. Both academic and work supervisors identified report writing, computer software applications and problem-solving as gaps that need to be addressed in curricula.

Securing workplaces in a dynamic socioeconomic and political environment was not easy. This was exacerbated by the increasing number of universities and other institutions of higher learning in the country as well as limited investment by the private sector. It was also learned that students who have links to influential people in key positions acquired placement to employers who paid remuneration for example NGOs and the private sector. However, local authorities such as the Harare city and Karoi town council used a professional approach to placing students. They advertised and interviewed students in a transparent manner. All the four students placed in these municipalities ascertained that they responded to newspaper advertisements, attended interviews and did not have any linkages to influential employees or "connections".

In spite of being the major employer, Government departments overburdened students with workloads and did not offer any remuneration. Because of low salaries in government, any opportunities to acquire income were grabbed by employees such as attending seminars and conferences where allowances were paid. This further increased student workload as they remained in the office doing work for their respective supervisors and other office bearers. Similar results were observed by Mashavira et al, (2014) and Edziwa and Chivheya (2013) that students under such circumstances acted as a source of cheap labor. From a different point of view, this exposes provided a platform for students to improve their ability to deal with a crisis in the work environment. The working environment in NGOs and the private sector was different with manageable workloads that were remunerated. As such, the propensity of students to work in a workplace where students are remunerated, offered opportunities for training and with manageable workload was high.

Work and Academic supervisors recommended that all social ecology modules should build a strong and balanced theory-practical component that should prepare students to deal with contemporary and future challenges. As previously written, communication and computer skills were necessary for students to be able to share their experiences with a wide audience. The study was limited to one subject area, social ecology, other departments should conduct similar research using different methodological approaches to reduce limits in the conclusions on how far we can go with reviewing the applicability of WRL to university curricula.

CONCLUSIONS

The case of the Social Ecology subject area illustrated that WRL has a direct impact on the development of curricula that meet the needs of the employers from different sectors. This complementary feedback from relevant industry provides a framework for enriching curricula with contemporary issues and prepares students for challenges in the future. While theory is vital for students, it is important to provide exposure to students in the practical or working environment to adapt and appropriately apply the gained skills from the classroom. Although the case study was based on a particular subject area, and as a learning process, the relevance of this study, which reflects on the teaching-learning practices at higher and tertiary institutions, there is a need for other subject areas or departments to do further research.

RECOMMENDATIONS

In light of the findings in this study, it is recommended that other research studies be done in other disciplines of the university or replicate the research for possible comparisons.

Computer skills and report writing are important operational requirements for students. Although appropriate modules are offered at part 1 level, these should increase the practical aspect so as to prepare students for the working environment. All social ecology modules should build a strong and balanced theory – practical components that should prepare students to deal with contemporary and future challenges.

REFERENCES

- 1. Altinay, L and Paraskevas, A. (2008) Planning Research in Hospitality and Tourism, Oxford, Butterworth-Heinemann.
- 2. Bereiter, C. and Scardamalia, M. (1993). Surpassing ourselves: an inquiry into the nature of expertise. Chicago: Open Court.
- 3. Bloom, B.S. (Ed.). Engelhart, M.D., Furst, E.J., Hill, W.H., Krathwohl, D.R. (1956). Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Co Inc.
- 4. Borgobello Ana, Nadia Soledad Peraltai and Néstor Daniel Roselli. (2013). Interaction among experience, teaching performance and student's learning at university level. Estudos de Psicologial Campinas, 30(2) I 169-176 abril junho.
- 5. Collin, K. (2003). Tynjälä, P. Integrating theory and practice? Employees' and students' experiences of learning at work. Journal of Workplace Learning, Vol. 15, No 7/8, p. 338-344.
- 6. Cornford, I. R. (2002). Learning-to-Learn Strategies as a Basis for Effective Lifelong Learning. International Journal of Lifelong Education, 21, 357–368.
- 7. Day, Helen. (2010). Work-Related Learning in English Studies: A Good Practice Guide. Report Series Number 10. https://issuu.com/englishsubjectcentre/docs/workrelatedlearning_guide
- 8. Edziwa, E and Chivheya, R. (2013). Farm Attachment as a Training Methodology for Zimbabwe Agricultural Colleges' Students, Post Land Reform: Challenges Encountered. Journal of Emerging Trends in Educational Research and Policy Studies, (JETERAPS) 4(1): 74-78.
- 9. http://www.marynsam.com/uploads/1/4/0/7/14075053/curriculum_development_and_implementation___factors_contributing_towards_curriculum_development_in_zimbabwe_higher_education_system.pdf
- 10. Le Maistre, C and Paré, A. (2006). A typology of the knowledge demonstrated by beginning professionals. In Tynjälä, P., Välimaa, J., Boulton-Lewis, G. (eds). Higher education and working life; collaborations, confrontations and challenges. Amsterdam: Elsevier.
- 11. Leinhardt, G., McCarthy Young, K., Merriman, J. (1995). Integrating professional knowledge: The theory of practice and the practice of theory. Learning and Instruction, 1995, Vol. 5 (4): p. 401-408.

- 12. Mashavira, Nhamo., Jeofrey, Mtemeri and Alick, Munzara. (2014). Interrogating Student Work Related Learning Experiences At A Selected University In Zimbabwe. International Journal of English and Education. ISSN: 2278-4012, Volume: 3(1): p 514-549. http://ijee.org/yahoo_site_admin/assets/docs/44_MAS.355821.pdf.
- 13. Primrose, K and Alexander, C. R. (2013). Curriculum development and implementation: factors contributing towards curriculum development in Zimbabwe higher education system. European Social Sciences Research Journal, 1(1), 55-65.
- 14. Seikkula-Leino, J., Ruskovaara, E., Ikavalko, M., Mahila, I. and Rytkola, T. (2010) Promoting entrepreneurship education: the role of the teacher? Education and Training, 52 (2), 117-27.
- 15. Siyakwazi, B. J. (1986).Booker, T. Washington, s Philosophy of the 'Grand Trinity' in Education, Zambesia, The Education Supplement.
- 16. The Work-related Learning Guide. (2008). A guidance document for employers, schools, colleges, students and their parents and careers. The Department for Children, Schools and Families.
- 17. Tynjälä, P., Slotte, V., Nieminen, J., Lonka, K. and Olkinuora, E. (2006). From University to Working Life: Graduates' Workplace Skills In Practice. In Tynjälä, P.; Välimaa, J.; Boulton-Lewis, G. (eds). Higher education and working life: collaborations, confrontations and challenges. Amsterdam: Elsevier, 2006, p. 73-88.