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THE IMPACT OF INDUSTRIAL PLACEMENT ON STUDENTS' EMPLOYABILITY SKILLS IN TERTIARY EDUCATION

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Abstract

This research aims at assessing the impact of industrial placement on students' employability skills in the tertiary education sector in Mauritius. Long-time neglected and considered as accessory to academic learning, industrial placement is nowadays a necessity for this category of students. In a competitive world where there needs be a suitable match between employment skills and job demands, industrial placement is rightly considered as a stepping stone to the forthcoming work-life career of the individual. The research states that students undergoing industrial placement in suitable companies learn the various skills and techniques in a job environment, gain greater confidence and maturity prior to embarking on a job. This study is limited to a sample of students from Université des Mascareignes that has formalised such training using an established methodology and framework to assess students. It is clearly approved that industrial placement is relevant in tertiary academic learning in that it bridges the gap between school and the immediate work environment.

Keywords

Industrial Placement, Tertiary Students, University, Employability

1. Introduction

Industrial placement is an activity promoted by tertiary institutions including universities with the option of providing the student with training in a work-related situation. According to Aston University, it can be called 'sandwich' or 'internship' using knowledge from a degree to a work environment (Aston University, 2016). This practice earlier applied to Western universities but has now become a phenomenon in most tertiary institutions. The basic objective for industrial placement is to bridge the gap between formal academic education and the job requirements. The skills and knowledge that students acquire in industry enriches their experience of education when they return to university (Loughborough University, 2016). Equally, internship programmes are meant to provide students the exposure and readiness to the workplace deemed necessary to turn out more competitive graduates (Bartolata, 2015).

In an earlier setting, industrial placement was not necessary in Mauritius because there were not too many university graduates. These highly educated people could expect joining a profession of their choice without preliminary training. Following the rise in the number of graduates in the country and the lack of job opportunities, it has become more and more difficult for such incumbents to get a job matching their expectations. Hanafi et al (2016), by making reference to Indonesia in their study, state that graduate courses and training are expected to strive independently or create new jobs to reduce unemployment and poverty. To ensure employability and quicker access to the work environment, institutions are keener today to think of industrial placement for their students. Mendez (2008) confirms the significance of industrial work placements on students' professional development and employability stating that it is widely accepted among work-related learning professionals and academics alike. This has become an essential aspect in of the competitive job environment today.

1.1 An Existing Mechanism in Tertiary Education

Although there is more interest in developing the industrial placement concept in Mauritius today, industrial placement existed in the past. When the Droopnath Ramphul

Polytechnic1[1] opened its doors in 1995 in Pamplemousses, in a twinning partnership with Singapore Polytechnic, it implemented industrial placement on a pilot basis during the early years of its operations. This was successfully achieved by its first students despite the fact that the concept was fairly new to Mauritius. Feedback from students highlighted certain benefits and shortcomings in the early stages of industrial placement. General observations obtained by lecturers in the role of student mentor were as follows: *Good exposure to the work environment, learning work practices that were new to students and gaining acquaintance with managers and potential employers*. From a negative perspective, industrial placement was viewed as a *non-productive* task with trainees undertaking simple jobs as photocopying, circulating messages and replacing absent staff.

Industrial placement, in the first phase of its application, remained fairly successful. Following a lack of incentives like stipends for supervisors and general absence of a suitable framework to support students in placement, this activity was stopped as it was deemed superficial at that particular time in the history of the polytechnic.

1.2 A mandatory requirement for a new university

Over the years, the existing educational premise in Pamplemousses transited from a polytechnic to a university status with changes in appellation like Maharishi Dayanand Polytechnic (1998), Swami Dayanand Institute of Management (2005) and ultimately Université des Mascareignes (UDM) in 2012.[2] On gaining the university status and becoming the fourth public university in Mauritius, the UDM partnered with Université de Limoges (France) with whom all the curriculum had to be improved and adapted to meet the needs of a new university. This condition required the fulfilment of new conditions like the development of new syllabus, enhancing French content in teaching but, equally, considering the need to have industrial placement as mandatory in the learning programme structure.

The view of making industrial placement an obligation for the UDM initially created some resistance from the fact that such an exercise was earlier undertaken with mixed results followed by some apprehension from employers who wanted students for direct job offer rather than a placement. Université de Limoges insisted that this was a mandatory criterion needed in the partnership and it should be perfectly integrated in the course structure.

[1]First name of the existing Université des Mascareignes.
[2]See Official website: www.udm.ac.mu regarding the history.

2. The Context of Industrial Placement

Industrial placement is a necessity in today's evolving educational system. Education at the tertiary level is inadequate without exposing the student to a practical work environment. Pedler (1974) observed that effective learning places the student at the centre of the learning experience. Employers might have argued that they need trained students to allow them easily integrate the job environment while responding to the needs of the organisation where they will work. Generally, students who are never posted to a company tend to perform less effectively than those who have ever been there. Industrial placement is seen as an activity that bridges the gap between the academic learning provided by the university and the world of work.

Both the university and work environments keep evolving at their own pace. If universities develop new course structures in line with what government and industry stakeholders are projecting, workplaces might also have evolved to some extent. Industrial placement has become part of the curriculum of higher education (Beggs et al., 2008) because the educational institutions normally do not have the facilities. Hence it is an avenue through which the industry complements what is taught in the classroom (Rothman, 2007). Additionally, offices have dramatically changed in some settings where information technology has been harnessed by creating 'smarter' work environments. These are more productive than the traditional office and need qualified, capable but trained employees. Manpower Group (2012) confirms in this perspective that young people apparently lack specific '21st century workplace skills' such as: *cooperation, communication, critical thinking, creativity,* and *a focus on the needs of the enterprise*.Besides technology, workplaces are also responding to the needs of international settings. For instance, companies might now be working 'around the clock' and need trained staff to cater to their existing needs. Students who are trained within this new and constrained environment are those who are more likely to develop opportunities to get a job.

2.1 Student's Employability

The key argument forwarded by experts from Université de Limoges was that, in the French system, recruitment opportunities are enhanced when employers meet students face-to-face at work. Based on their experience of 'stage', the French colleagues wanted the same to be applied to the Mauritian university bearing in mind that this could be an advantage prior to what other institutions had been offering so far. Student placements or 'stage' is considered essential in France while the internship can be seen as a prolonged 'job interview' where the prospects of

getting hired after this period are high (Passport to Trade, 2014). Student's employability might be enhanced by encouraging students to be on placement in a suitable timeframe where they could really grasp the different issues that they need to be familiar with.

In essence, the techniques and skills that students were expected to develop and master were, among others, a knowledge of a work setting, an understanding of the processes in office, an appreciation of managerial techniques, leadership and communication including work culture. The Université de Limoges consultants explained in a training session that student's employability could be a plus point to consider when competition has been staring universities that have started to flourish in Mauritius under a once popular slogan 'one graduate per family' (University World News, 2011). Academic staff, though skeptical at the beginning, started to discover the new perspective of industrial placement under the French system that was so far unknown to them. This triggered devoted attention when the benefits of industrial placement were detailed.

2.2 A framework for industrial placement

The collaboration between Université de Limogesand UDM was developed through the creation of a framework for industrial attachment. The Charter of student placement in companies (2006) quoted from Euro Education (2014) provided three new guarantees aimed at securing work placement: statutory mentoring by an academic and a member of the company; a standard agreement binding the three signatories: the lecturer or supervisor, the member of the company or mentor and the student; the introduction of assessment and monitoring methods. It was clear that this could not be a copy and paste exercise from what had been earlier undertaken in France. There was a need to have a placement exercise that would bridge the difference between a French education system and a local one that mainly stemmed from a British legacy with English language used as the main medium of study. In this perspective, there were report drafts undertaken to see how the French concept could well apply to the new and undeveloped industrial placement system in Mauritius. An essential component of the placement exercise was that it would be at par with any taught module at the UDM and the grades were scaled to 20 as for all courses.

The following subsections highlight the conditions required to fulfil the placement exercise.[3]

[3]Information summarised from Student Logbook on Industrial Attachment.

A substantive placement period

Industrial placement at the UDM would be a substantive assignment for the student. This would apply to third and final year students undertaking the undergraduate programmes 'Licence' or the equivalent BSc course. The timeframe was three months' intensive industrial placement starting from March of every academic year and ending June of the same year. The company could be either selected by the student or the UDM.

Proper roles of mentor and supervisor

The mentor would be the person to whom the student directly reports to. He/ She should have full supervision of the student and agree to accompany him/her during the three-month placement. The supervisor would be a lecturer who is employed at the UDM and who has been selected to offer his assistance to the student during the placement period.

Regular official onsite visits by supervisor

The supervisor should make at least two visits to the student during the placement period. These could be adequately scheduled like three weeks after the student is on placement and two weeks prior to ending the placement. It was also advisable for supervisors to keep contact with the student either through e-mail, telephone or Skype.

Daily filling of the student logbook

Once being posted to a company, the student is expected to fill the Student logbook. This is an official UDM document developed by its Quality Assurance department where the student is provided with a document designed for his work requirements. All activities done per day should be included with a brief description of tasks undertaken.

Verification and endorsement by mentor

The weekly report should be signed by the mentor. Such information should be verified while the mentor records the performance of the student per week. Suggestions for improvement are mentioned as well as the monitoring of the student attendance during the placement. Any change should be notified to the supervisor.

Grading by mentor

At the end of the three-month industrial placement, the mentor is invited to grade the student with regards to his performance at work. There are three broad gradings namely A (18-

20), B (15-17) and C (12-15). A lower mark is counted as D and immediate action must be taken to look into the matter. If a student fails in his placement, the exercise should be undertaken a second time. So far, this exceptional situation has not cropped up.

Drafting of 'rapport de stage'

The 'rapport de stage' is a report that the student must submit to the supervisor who also guides him during his placement. It is a structured report on the placement exercise, the organisation structure, a summary of main activities carried out, the experience gained at work including the challenges and benefits of the industrial placement. A 3.500-5,000-word document is needed.

Presentation and panel grading

Once the student completes his placement and 'rapport de stage', he/she will have to present the document in a panel with the mentor (optional), the supervisor and an independent panel member. All the three incumbents will grade the student according to prescribed criteria like presentation style, student grooming, clarity of expression, innovative concepts learnt and report content. The final grading comprises marks according the following weightings: 40% work placement, 30% 'rapport de stage 'and 30% grading by panel.

3. Research Methodology

The industrial placement exercise that has been successfully re-engineered and undertaken for the past three years prompted the researcher to find out how and why industrial placement was essential as part of the learning requirements of the UDM and how it benefited the students in question.

The research methodology was devised as follows. Around 125 students took part in industrial placement at UDM, Pamplemousses Campus, from early April to end of June 2016 after having sat for their final examinations and completed their final year dissertation. Out of the 125 students, 65 were both from the Human Resource Management (50) and the Marketing cohort (15). The researcher was supervisor for 10 students during industrial attachment where he visited organisations like parastatal government bodies (District Councils of Moka and Pamplemousses), hotels (Prince Maurice, Anahita, Shangrila) and a few private sole proprietorships where students also had placement. He was panel member of 10 other students to whom he was not directly associated. Table 1 depicts the profile of students under supervision.

Table 1: *Students under supervision in industrial placement*

Category	*Number of students*	*Percentage*	*Categories supervised*
Human Resource Management	50	40	YES
Marketing	15	12	YES
Banking and Accounting	40	32	YES
Information Technology	20	16	NO

3.1 Research Questions

Following the research premise, research questions were devised regarding the impact of industrial placement on UDM students.

-What is the relevance of industrial placement at UDM?

-Does the student benefit from industrial placement?

-Does industrial placement improve students' employability?

-Does industrial attachment prepare the student to step to a first job?

3.2 Research Hypotheses

The research questions led to the development of a few research hypotheses that were linked to the industrial placement exercise. They are as follows:

H_1: Industrial placement is an essential exercise for the student.

Null Hypothesis: Industrial placement has no importance to the student.

H_2: Industrial placement offers tangible benefits to the student.

Null Hypothesis: Industrial placement offers no tangible benefit to the student.

H_3: Industrial placement enhances the student's employability.

Null Hypothesis: There is no evidence of greater student employability after industrial placement.

3.3 Observational Method

One method for recording information was the observational method where the researcher used the assessment sheets both during and after the industrial placement, particularly during the 'rapport de stage' presentation. Questions were asked to all the 20 students in the panel with reference to the time and activities that the spent during their 12-week placement.

These were open-ended questions but were also recorded during the assessment phase. The arguments developed were aligned with the research questions.

3.4 Questionnaire Method

The Questionnaire method was used as a means of better recording information because these were structured as per the needs of the existing research.12 questions were asked to all the students in the Human Resource Management and the Marketing cohorts. Information was recorded on a Likert Scale with an average of 50 respondents forming part of nearly 77% of the sample under investigation.

3.5 Questionnaire

The questionnaire provided below highlights the set of questions asked to the students.

1. Is industrial placement relevant to me?
2. Should my course comprise industrial placement?
3. Does industrial placement blend practice and theory?
4. Is industrial placement beneficial to me?
5. Did I learn new issues during my placement?
6. Did I gain familiarity with a real work situation?
7. Have I developed better skills during placement?
8. Am I more versatile at work?
9. Do you think you are more employable following industrial placement?
10. In which way has the industrial placement enhanced my employability?
11. Do I have better chances to secure a job?
12. Could I recommend industrial placement to other students?

Incipiently, the questions were bundled under the key hypotheses. Questions 1-3 addressed Hypothesis H_1 focusing on the importance of industrial placement, Questions 4-8 addressed Hypothesis H_2 focusing on the tangible benefits of industrial placement while Questions 9-12 addressed the final hypothesis H_3 regarding the enhancement of students' employability.

Responses were cumulated both from the observational and questionnaire method. Generally, the observational method complemented the findings of the research.

4. Findings and Discussion

The research findings are recorded in Table 1 below. Twelve questions were asked to the 50 respondents where care was taken to review outliers and see that are effective responses were recorded. A Likert Scale was used in the questionnaire with four scales: Strongly disagree-1, Disagree-2, Agree-3 and Strongly Agree-4. The mean value was 2.5/4, the weakest and strongest values would be respectively 1 and 4. In line with the questionnaire, there were also qualitative data recorded in the form of selected responses from the respondents which would, to some extent, support the findings.

Table 2: *Responses of respondents with mean value*

Q.	*Item.*	*SD*	*D*	*A*	*SA*	**Mean**
1.	Industrial placement is relevant to me.	0	2	11	37	**3.7**
2.	My course should comprise industrial placement.	0	0	10	40	**3.8**
3.	Industrial placement blends practice and theory.	2	8	14	26	**3.28**
4.	Industrial placement has been beneficial to me.	0	12	15	23	**3.22**
5.	I learnt new issues during my placement.	1	8	12	29	**3.38**
6.	I gained familiarity with a real work situation.	0	0	15	35	**3.7**
7.	I think I am more employable following industrial placement.	1	3	23	23	**2.96**
8.	I have developed better skills during placement.	0	4	20	26	**3.44**
9.	I am more versatile at work.	1	4	20	25	**3.38**
10.	The industrial placement has enhanced my employability.	2	5	17	26	**3.34**
11.	I have better chances to secure a job.	3	6	20	22	**3.26**
12.	I recommend industrial placement to other students.	0	4	18	28	**3.48**

Questions 1-3 analysed the first hypothesis linked with the importance of industrial attachment. In the relevance of industrial attachment, responses were strongly in favour with a mean value of 3.7. The same argument was recorded in the necessity for industrial attachment 3.8 but a slightly lower yet strong score for the blending of theory and practice regarding

placement because 10 respondents showed some reserve possibly because they might not have effectively benefited from it.

Selective qualitative arguments were recorded as follows:

'*The placement is really useful to me as part of my learning. Industrial placement is really important as it complements the course that we have followed in class. Placement is an opportunity for us to discover the reality of the professional world.*'

These views aligned with that of Au Yeung et al. (1993) stating that the practical work placement with authentic and situated work experience could be seen as the innovative answer to graduates' difficulties to integrate into the job market. It also suggested that work placements were effective in giving students insight into the world of work and career prospects and helping them to integrate into the work environment.

Questions 4-8 focused on the tangible benefits of industrial placement. 38 out of the 50 respondents were highly positive regarding the benefits of placement. 29 respondents strongly agreed that they had learnt new things during their placement. All the respondents stated that they gained better familiarity with the work environment with 70% who strongly agreed. There were equal scores of 'Agree' and 'Strongly Agree' regarding the expectation of being potentially employable during placement. In the final item, 46 students out of 50 claimed that they had developed better skills during placement. The lowest mean was scored on the issue of Employability—Item 7— 2.96 since this was still apprehension regarding employability.

Selective qualitative answers that were recorded were as follows:

'*I have enhanced my communication skills at work. I was initially shy but I could well integrate the group. My mentor encouraged me to be more assertive and I developed my confidence. I had the opportunity to develop my leadership skills in organising special welfare activities in the hotel where I worked. I developed the practice of dealing on high profile Accounting issues at the District Council.*'

The tangible benefits could be also associated with those of the Confederation of British Industry stating 'increased confidence is widely mentioned by universities, employers and students as a beneficial outcome of work-related learning and formal work placements' (Confederation of British Industry, 2009).

Questions 9-12 analysed the enhancement of student's employability during industrial placement. Most respondents stated that they had become more versatile at work with a mean

score of 3.38. Regarding employability, 43 respondents stated that they might become better employable while 7 answered negatively. In Item 11 that asked whether placement offered the students a better chance to obtain jobs, the mean score was 3.26 with a little apprehension of job uncertainty in today's environment. Scores were quite impressive (3.48) when students were asked whether they would recommend industrial placement to prospective students in existing batches.

Selective qualitative answers in the last category were recorded as follows:

'*I have got a potential job offer following the placement. Otherwise, this would never have been possible. My mentor has encouraged me to extend my placement for two months at the District Council. I might be referred by my mentor in case if there is a full-time vacancy in a related organisation*.'

Mc Farlane-Dick and Roy (2006) state that effective placements ensure that students and academic colleagues alike see employability as a valuable, integral part of the student experience. In the UDM case, all students obtained a testimony letter that stated the time that they had spent during their industrial placement with mention of their performance in a few cases.

4.1 The panel for industrial placement

In line with the research findings, there was a panel on early July 2016 where students had to present their 'rapport de stage' that they had compiled during their time in the various companies where they were trained. A few mentors who worked with the students attended the panel and stated their satisfaction regarding the performance of their trainees.

Selective information from mentors during industrial placement is recorded below:

'Student showed excellent abilities during the placement.'

'He overcame inherent weaknesses and improved his communication skills.'

'I learnt new Marketing techniques from the student that I can apply at work.'

'With more training, my trainee could become an effective employee in the future.'

'My trainee helped me shoulder tasks in a professional way and I recommend her for any job.'

'I have a positive image of UDM trainees and I shall welcome them whenever a job opportunity arises.'

4.2 Confirmation of Hypotheses with aggregate mean values

This sub-section confirms the three hypotheses that were identified for the research. Firstly, the relevance of industrial placement provided three mean values of 3.7, 3.8 and 3,28 respectively. Since they were much higher than the average value 2.5, it is confirmed that industrial placement is relevant for all students of UDM. The aggregate mean for hypothesis $H_1$is 3.59.

The second hypothesis H_2 checked the tangible benefits of industrial placement. The mean values for items 4-8 were respectively 3.22, 3.38, 3.7, 2.96 and 3.44. The aggregate mean value for the hypothesis was 3.34. Here again, the value largely exceeded the average value 2.5 stating that in Hypothesis H_2, students do gain tangible benefits from their three-month placement.

The third hypothesis H_3 searched the employability of students. The values for items 9-12 relating to the hypothesis were 3.38, 3.34, 3.26 and 3.48 respectively. Here, all values exceeded the average value of 2.5 with an aggregate mean of 3.36 confirming Hypothesis H_3 regarding employability from industrial placement.

Figure 1 depicts a diagrammatic illustration of the aggregate mean values of the three hypotheses with the average value of 2.5.

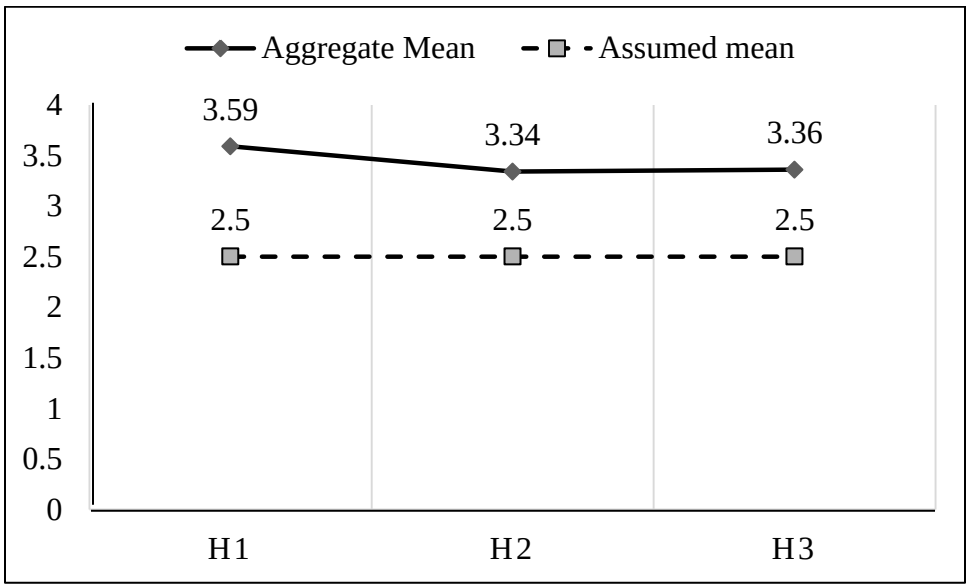

Figure 1: *Aggregate mean values and average value compared.*

From the observation, it is seen that the relevance of industrial placement scores the highest among students' perception, the benefit of industrial placement and the opportunities for

employability remain lower but still higher than the average value of 2.5 owing to the fact that it is always difficult for students to make self-evaluations of their time when they were offered placement and their own expectation of being employable at a time when unemployment among the youth in Mauritius in the age bracket 18-30 is as high as 30%. The encouraging percentage nevertheless states the relevance of the third hypothesis.

5. Conclusion

The research analysed the impact of industrial placement on students' employability skills in tertiary education namely at the Université des Mascareignes. This university purports that, in all courses offered on a full-time basis to its students, it is mandatory for all students to have industrial placement. This effort was undertaken at an early stage when the UDM was a polytechnic but the concept was abandoned a few years later following its first application. The existing university's partnership with Université de Limoges (France) reverted the local Mauritian university to rethink industrial attachment. This time, the effort was undertaken in a more strategic manner whereby all documents pertaining to student placement were formalised and developed in such a way to make the placement a productive activity. Since industrial placement is also examined as a full-fledged course in line with all taught courses, students in placement were much indebted to give their best during the exercise to obtain excellent scores. Incipiently, academics from the UDM as well as mentors found the effort commendable in that both potential employers and students benefited from the activity. Nadim et al (2016) supported that for organisations to be effective and successful, they need to have employees who go beyond their formal job descriptions and liberally give their attention, time and vigour to the organisation.There was higher confidence from students regarding the relevance of industrial placement, the tangible benefits found in it and the opportunity of being employable. Oba (2007) confirms this point by stating that concerted efforts are however needed from academy, industry, government and other stakeholders to enhance the employability of graduates and to establish new employment practices adapted to the 21st century.Although aggregate scores varied in the present research undertaken, it could be claimed that industrial placement had a positive impact on students in enhancing their employability. This could be supported by the relative short time span for a majority to find a job but also to get on their first jobs with more confidence than without being offered a placement during their studies.

6. Limitations/Delimitations

This research exercise was limited to a study of students' perception of industrial placement which took place during a three-month term at Université des Mascareignes. It depicted a viewpoint of a limited number of students taking part in the exercise and, in no way, represents a generalised concept on industrial placement. The results might have varied if the research were undertaken at the national level. In no way, the results of the research claim the relevance of industrial placement and its confirmation on a broader scale despite the fact that efforts were taken to direct the effort of gaining the most accurate results from the field research.

7. Acknowledgments

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References

Aston University (2016) What is industrial placement? www.aston.ac.uk. Retrieved on 15th August 2016.

Au Yeung, Y. N., Lai, C. C., Ho, W. F., Sivan, A., Gow, L., & Ledesma, J. (1993). Attitudes towards industrial training in the BEng course in building services engineering at Hong Kong Polytechnic. Studies in Higher Education, 18(2), 205-226. https://doi.org/10.1080/03075079312331382379

Bartolata, J. (2015) From academe to industry: Which academic skills matter? People Vol2, Issue 1, pp. 09-16. DOI: http://dx.doi.org/10.20391/pijss.2016.21.0916, ISSN 2454-5899.

Beggs, B. A., Ross, C. M., & Knapp, J. S. (2006). Internships in leisure services: An analysis of student and practitioner perceptions and expectations. Schole, 21, 1-20.

Charter for Student placement (2006) quoted in Euro Education, euroeducation.net.

Confederation of British Industry (2009) Future Fit: Preparing Graduates for the World of Work, London: Confederation of British Industry Higher Education Task Force.

Euro Education (2014) Structure of the higher education system in France, The European Education Directory, http://www.euroeducation.net.

Hanafi, S., Ediwarman, D., Juniardi, Y. and Wibowo, F. (2016) Entrepreneurial-based education to improve life skill community in Banten Province, People, Vol 2, Issue 2, pp 41-54, DOI-http://dx.doi.org/10.20319/pijss.2016.22.4154, ISSN 2454-5899. ttps://doi.org/10.20319/pijss.2016.22.4154

Loughborough University (2016) Industrial placement. Lboro.ac.uk. Retrieved on 15th August 2016.

Manpower Group (2012) Youth unemployment challenge and solutions, http://www3.weforum.org.

Mc Farlane-Dick, D. and Roy, A. (2006) Ensuring student employability: Innovative projects from across the curriculum, University of Glasgow.

Mendez, R. (2008) The Correlation Between Industrial Placements and Final Degree Results, University of Leicester.

Nadim, M., Hassan, M., Abbas, S., and Naveed, A. (2016) The role of organizational commitment and perceived organizational support in promoting organizational citizenship behavior, People, Vol 2, Issue 3, pp 54-67, DOI- https://doi.org/10.20319/pijss.2016.23.5467.

Oba, J. (2007) Enhancement of the employability of graduates–institutional efforts and governmental policies in Japan, University Studies No. 35, August 2007 (ISSN0916-0264), pp 51-65.

Passport to trade (2014) Internship and Placement, business-culture.org. business-culture.org

Pedler, M. (1974). Learning in management education. Journal of European Training, 3(3), 82-94.

Rothman, M. (2007). Lessons learned: Advice to employers from interns. Journal of Education for business, 82(3), 140-144. https://doi.org/10.3200/JOEB.82.3.140-144

University World News (2011) Minister outlines knowledge hub plans, Issue 191, "nd October 2011.

APPENDIX A1: *Scaling of scores on Likert Scale*

Q.	Item.	SD 1	D 2	A 3	SA 4
1.	Industrial placement is relevant to me.	0	4	33	148
2.	My course should comprise industrial placement.	0	0	30	160
3.	Industrial placement blends practice and theory.	2	16	42	104
4.	Industrial placement has been beneficial to me.	0	24	45	92
5.	I learnt new issues during my placement.	1	16	36	116
6.	I gained familiarity with a real work situation.	0	0	45	140
7.	I think I am more employable following industrial placement.	1	6	69	92
8.	I have developed better skills during placement.	0	8	60	104
9.	I am more versatile at work.	1	8	60	100
10.	The industrial placement has enhanced my employability.	2	10	51	104
11.	I have better chances to secure a job.	3	12	60	88
12.	I recommend industrial placement to other students.	0	8	54	112

APPENDIX A2: *Mean Values*

Q.	Item.	Mean
1.	Industrial placement is relevant to me.	3.7
2.	My course should comprise industrial placement.	3.8
3.	Industrial placement blends practice and theory.	3.28
4.	Industrial placement has been beneficial to me.	3.22
5.	I learnt new issues during my placement.	3.38
6.	I gained familiarity with a real work situation.	3.7

7.	I think I am more employable following industrial placement.	2.96
8.	I have developed better skills during placement.	3.44
9.	I am more versatile at work.	3.38
10.	The industrial placement has enhanced my employability.	3.34
11.	I have better chances to secure a job.	3.26
12.	I recommend industrial placement to other students.	3.48