

4th International Academic Conference on **Teaching, Learning and Education**

Student Industrial Training: It is Impact on Teaching and Learning of Fashion Design and Textiles

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Abstract

Studies have revealed that industrial training is vital to higher institutions which train students in terms of skills acquisition. Therefore, there is a need to incorporate the concept of industrial training as a requirement which students need to fulfill before they are considered for graduation. Students during industrial attachment are expected to relate what they learn in school to what is done in the industry. Again, students are also expected to learn something new to what they learn in the training institutions in order to prepare them well to meet the demands of the job market. The objectives of the study are to: Find out what students expect from the industry during industrial training. Analyze the kind of training given to students in the industry. Evaluate the impact of industrial training of students on teaching and learning of fashion. The researchers adopted Descriptive survey approach with the use of questionnaire for the study. Purposive sampling technique was used to sample respondents. The study revealed the following major findings: there is linkage between what students learn in school and what goes on in the industry, Students do not expect to learn new things from the industry, students had objectives in mind when going for industrial attachment, the study found that student respondents were given supervisors to perform specific work, students do well in class after industrial attachment. The findings indicate that there should be a linkage between skill training institutions and industry.

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1. Introduction

Student industrial training or attachment in the fashion and textiles industry enhances the mutual relationship between training institutions and the industry. Eventually, industrial attachment or training is becoming mandatory to all tertiary institutions which run programmes involving skill training. Economic development and globalization (Mohamad and Kamarul, 2011) call for the need to revise Technical Education System to prepare students with the relevant skills to compete around the globe. Mohamad and Kamarul (2011) noted that technical skill is not enough for students, but further stated that “students must also be equipped with soft skills, appropriate work attitude and professionalism so that they could become effective and productive contributor to their organization” (p.281).

The industry is looking up for personnel who can perform and contribute to world of work. This has call for the need of some of the institutions to have a special industrial attachment programmes. For instance, Universiti Kebangsaan Malaysia has a programme where students have to go through ten (10) to twelve-weeks industrial training (Afida, Osman, Omar, Kofli and Suhana, 2013). The industrial training programme Nurfar (2013) gives the students the opportunity to have the first real-life experience. Nurfar (2013) further stated that through industrial training students learn other trade secrets. Studies according to Afida et al. (2013) found that industrial training has positive effect on the student performance, therefore affecting their CGPA and also increasing their chances in job placement.

1.2 Industrial attachment

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Industrial attachment should have its own objectives to function well in the institutions which run such a programme. A study done by Hwang and Thim (1995) found the following objectives: to apply knowledge and skills in the production, planning and design, students are expected to get first-hand knowledge in their profession, student to get hands on experience when working with people, study problems and requirement of the industry which will help them to choose their area of specification.

Studying various industrial attachment programmes, Nanyang Technological University of Singapore studied industrial attachment of University of Singapore and other Universities. After the study, it was found (Hwang and Thim, 1995) that six (6) month industrial attachment (IA) was preferred to three month programme with the following reasons that: one-two months training was not sufficient to handle machines, duration more than six (6) months will put financial burden on the industries. To bridge the gap between theory and practice (Obasi, 2015), Student Industrial Work Experience Scheme (SIWES) was designed by Nigeria University Commission (NUC). The scheme was to bring students to light in the industrial environment and to acquire competencies which will help them to be fit into their field of work.

1.2.1 Industrial attachment benefits

Industrial attachment is an opportunity given to students to relate the theory taught in school to practical training in the industry (Osam, 2010). Osam further states that industrial training help in linking Universities to the industry and again open employment avenue for students after industrial attachment. Student is able to learn new skills (Nyankang'i, 2015) in the training institutions and match it with what is been done in the industry. This confirms Osam (2010) perception on industrial attachment. Industrial attachment (Student Industrial Attachment Programme, n.d) expose students to technologies which are not readily available to students in their institutions, and also build confidence in operation technically, problem solving, team work and working with experts in the job market. Muzaffar (2014) state that industrial attachment challenges students to examine the values of

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the organization and expediencies involved, and also assess student's education which relates to Industrial Attachment. Muzaffar (2014) mentioned benefits of an industrial attachment as exploring career interests, learning new skills, gaining work experience, developing a professional network and understanding workplace expectations.

1.2.2 Expected training to students on attachment

There is no doubt that student from the training institutions expect something different from the industry when they go for industrial training. Students expect to learn new ideas and skills lacking in their field of study which will enable them to fit directly into the world of work. After the industrial training, the interns in their own way should be able to solve and manage (Ayarkwa et al., 2012) their own work, acquire the needed capabilities, skills personal qualities and ability to perform well.

1.2.3 Impact of industrial training on students learning

Industrial training for students is expected to have impact on student's performance if it is well structured and implemented. After the industrial training Obasi (2015), noted that the industrial practical experience help students to develop skills through the use of tools and equipment to execute task related to their specialized area of study. Obasi further explained that skills acquired from the industry enable students to match societal resources to the needs of the society. Matamande, Nyikahadzoi, Taderera and Mandimika (2011) noted the following as the impact of industrial attachment on students: it help students to appreciate the real world of work, students are able to match theory to practice in the job market, improve communication skills of interns and again enhances the confidence level of students

A study conducted by Koehler (1974) as cited in Megat and Ismail (2015) found that the academic performance of students who participate in industrial training perform well as compare to students who do not participate in the industrial training. Koehler (1974) as cited in Megat and

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Ismail (2015) assessed the student's intern's performance using their Cumulative Grade Point Average (CGPA). Arnold and Garland (1990) as cited in Megat and Ismail (2015) states that there is no clear difference between academic performance of students and industrial training. English and Koeppen (1993) cited in Megat and Ismail (2015) studies also found that interns' students perform well than non-interns students using their Grade Point Average (GPA).

1.3 Internship

Internship according to Kinsky (1982) "is undergraduate structured practical professional experiences(s) under the supervision of qualified academic and agency personnel which (are) offered for academic credit" (p.39). Internship is professional- oriented and aims to prepare students with work-related skills and expertise related to their future career. The programme provides students with the opportunity to discover job interest and objectives through real work experience under professional guidance. Internship constitutes an interdisciplinary learning that is truly integrated into the community, and serves as a unique type of learning approach: a form of learner-centered education.

1.3.1 Internship Experience

Studies has shown that internship bridge the gap between industry and academia as well as the world of work. Internship is an opportunity given to students to explore their career interest in the world of work. Through the internship, the interns may get contact through networking (Kay, 2018) which will help in the future development of career opportunities. Kay (2018) noted that before the beginning of the internship the interns should have in mind some expectation from the industry or the place of internship. Again whether after internship one is able to acquire new skills and if possible how to apply the skills acquired. It is expected that internship will provide enough and relevant to the interns area of study.

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1.3.2 Focus of Internship

Internships are defined as undergraduate structured practical professional experience(s) under the supervision of qualified academic and agency personnel which (are) offered for academic credit (Konsky, 1982, p.39). Internship is profession oriented and aims to prepare students with work related skills expertise related to their future career. The program provides students with the opportunity to discover job interests and objectives through real work experience under professional guidance. According to Merit (2008), internship constitutes an interdisciplinary learning that is truly integrated into the community, and serves as a unique type of learning approach a form of learner centered education.

1.4 Teaching and Learning

Teaching and learning for knowledge acquisition is paramount in every educational institution. Cross (1987) stated that students learn during practice. Therefore students active involvement in learning task help to know more than when students are passive in the learning process. IGI (2018) explained teaching as the intensive sharing of facts and experience. Ann (2012) also explained teaching as willingly sharing of ones experiences with students in order for them to learn. Learning according to Berkeley Center for Teaching & Learning (2018) is a procedure that brings a change in knowledge or attitude through experience. Industrial attachment in relation to teaching and learning from Cross (2012): IGI (2018): Ann (2012) and Berkeley Center for Teaching & Learning (2018), affirm the need to have experience in the industry to understand whatever they study in school.

1.5 Concept of Learning

Learning is a process of acquiring knowledge, skills, and experience through understanding of how to perform a task or job. Learning brings about behavioural change in individuals. Learning

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again is about new ways of doing something with no limited period to achieve a goal (Dharmaraji, n.d). Kingsley and Garry (1957) as cited in Dharmaraji (n.d) stated that “learning is the process by which behavior (in the broader sense) is originated or changes through practice or training” (p.4). Sequeira (2017) also affirm that learning brings change as a result of developing new skills and attitudinal change.

Research Questions

1. What do the students expect from the industry during their industrial training?
2. What impact does the industrial training has on teaching and learning of fashion and Textiles?

2. Methodology

The researcher adopted quantitative approach for the study. Edmonds and Kennedy (2012) as cited in Abraham (n.d) explain quantitative research as “research in which the researcher decides what to study; asks specific, narrow questions; collects quantifiable data from participants; analyzes these numbers using statistics; and conducts the inquiry in an unbiased, objective manner” (p.12). Descriptive survey method using questionnaire was used for data collection.

The researcher used purposive sampling technique to select respondents knowledgeable in the area of study. Purposive sampling according to Aditham (2008) is to serve a purpose for a study. The statement made by Aditham is also affirmed by Leedy (2005) that during sampling people or respondents are selected for a purpose. Fraenkel (2012) stated that sampling is the procedure for selecting respondents among the larger population. Kumekpor (2002) share similar view with Fraenkel (2012) that, sampling is a way of selecting sample from a population with similar characteristics. Data collected was coded and analyzed using statistical package for social science (SPSS) and presented by means of tables to help enhance the understanding of the data as well as provide a summary of the data.

3. Results and Discussions

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The findings and discussions have been presented in themes and they relates to the objectives of the study, these include finding out what students expect from the industry during industrial training, analyze the kind of training given to students in the industry, and to evaluate the impact of industrial training of students on teaching and learning of fashion.

Fashion Programs of Study

Table 1. Fashion Programs of Study

Program	Frequency	Percentage
HND	24	72.7
Advance	3	9.10
Certificate	6	18.20
Total	33	100

Source: Field work (2018)

Table 1 shows programme of study of student respondents. Out of the 33 respondents used for the study, 24 respondents constituting (72.7%) are studying Higher National Diploma in Fashion and Textiles (HND), 3 representing (9.10%) of the student's study Advance Fashion and Textiles, 6 students (18.2%) study Certificate in Fashion and Textiles. This suggests that there are more HND study in the study area.

Program Level of Students



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Table 2. Program Level of Students

Level	Frequency	Percentage
100	4	12.1
200	29	87.9
Total	33	100

Source: Field work (2018)

From table 2 which shows the level of students for the study, it was found that majority (87.9%) of the students are in level two hundred of their study program, this is followed by those in in level one hundred representing 12.1% of the students for the study.

Industrial Attachment

Table 3. Industrial Attachment

Attachment	Frequency	Percentage	Yes	Frequency	Percentage
Yes	33	100	Fashion	21	63.6
No	0	0.00	Textiles	12	36.4
Totals	33	100	Total	33	100

Source: Field work (2018)

In table 3 the study found that, 33 respondents representing (100%) for the study went for an industrial attachment. Out of the 33 students who went for the attachment 21, representing (63.6%) of the students did their industrial attachment in the Fashion industry whiles the remaining (36.4%) of the students did their attachments in the textiles industries. The figures implied that, students attach importance to industrial attachment with the view of acquiring knowledge and skills Muzaffar (2014) from the industry.



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Level of the Industrial Attachment

Table 4. Level of the Industrial Attachment

Level	Frequency	Percentage
100	26	78.8
200	7	21.2
Total	33	100

Source: Field work (2018)

The level of the industrial attachment was done during the long vacation period of the students table 4. It was found that 78.8% of the students did their industrial attachment after the completion of their level 100 program while the remaining (21.2%) had their industrial attachment after the completion of their level 200 program.

Duration of the Industrial Attachment

Table 5. Duration of the Industrial Attachment

Durations	Frequency	Percentage
2 – 3 weeks	8	24.2
4 – 6 weeks	2	6.10
7 – 8 weeks	23	69.7
Total	33	100

Source: Field work (2018)

The study found that majority 69.7% of the students did their industrial attachment within seven to eight weeks (almost two months), 24.2% of the students had theirs within two to three weeks and the least duration of the industrial attachment was within four to six weeks (one month, two weeks) representing 6.10%. These show that, most of the students had a lot of time period to learn in the field of their attachment.

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Objective of the Industrial Attachment

Table 6. Objective of the Industrial Attachment

Objective	Frequency	Percentage
Yes	29	87.9
No	4	12.1
Total	33	100

Source: Field work (2018)

In table 6 majority of the students 89.9 out of 33 students are of the view that they did had some objective in mind while 12.1% of the students did not have any thing in mind before their industrial attachments. Some of the objective in mind of the students include: knowing more about sewing, drafting, free hand cutting and how to use industrial machines, to acquire more skills and knowledge (Nyankang'i, 2015), to learn on different styles, cutting without a pattern.

Expectation of the Industrial Attachment

Table 7. Expectation of the Industrial Attachment

Expectation	Frequency	Percentage
Yes	13	39.4
No	20	60.6
Total	33	100

Source: Field work (2018)

Table 7 indicate expectation of industrial attachment. The study found that only (39.4%) out of 33 students were expecting to learn something new during the attachment period. Some of the things students were expecting to learn from their industrial attachment include: learning on different types of design and how to cut them, sewing of trousers, free hand cutting and measurement. Only (60.6%) of the students were not expecting to learn new things.



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Industrial Attachment Orientation

Table 8. Industrial Attachment Orientation

Challenges	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: Field work (2018)

The study found as shown in table 4.1.8 that 66.7% of the students were given orientation in their various attachment places before the starts of work while 33.3% were of the view that they were not given any form of orientation.

Assignments of Supervisor and Specific work

Table 9. Assignment of Supervisor and Specific work

Attachment	Supervisor		Specific work	
	Frequency	Percentage	Frequency	Percentage
Yes	29	87.9	19	57.6
No	4	12.1	14	42.4
Totals	33	100	33	100

Source: Field work (2018)

As indicated in table 9, the study found that 87.9% of the students were assigned to supervisors during their attachment periods while 12.1% of the students were not assigned to supervisors. It was also observed from the study that 57.6% of the students who embark on the industrial attachments were given specific task to accomplish. Some of the specific work assigned to

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students includes: sewing, fixing bottoms holes, fixing zips, jacket and suit, tailoring whiles 42.4% of the students were not give specific task or work to do.

Supervisor Feedbacks

Table 10. Supervisor Feedbacks

Feedbacks	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: Field work (2018)

The study also revealed as shown in table 10, that 66.7% out of 33 students received feedbacks on their performance from the supervisor's whiles 33.3% were of the view that they do received feedbacks on their performance from the supervisors.

Linkage of classroom learning to Industrial Training

Table 11. Linking classroom learning to Industries

	Frequency	Percentage
Yes	22	66.7
No	11	33.3
Total	33	100

Source: Field work (2018)

Table 11 show linkages between what students learn in school to the industry. Out of the 33 students in the study, 667% agree that they are able to link what they have learnt in school to what they learn from industry. 33.3% were not able to link what they have been taught in class to what been learnt in the industry. This affirm the assertion of Matamande et al. (n.d) that student learn from the industry to match the industry practice to what they learn in school.



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Examination Performance

Table 12 Examination Performance

Performance	Frequency	Percentage
80 – 100	20	60.6
70 – 79	11	33.3
60 – 69	2	6.1
Total	33	100

Source: Field work (2018)

The study found as in table 12 that majority 60.6% of the students do very well in their end of semester examination after they have gone through industrial attachments, with a score of 80 – 100 %. Thirty-three per cent (33.3%) of the students have their examination marks within 70 – 90% and the least performance of students 6.1% is 60 – 69. This information gives the impression that students perform better in class and in their examination when they return from industrial attachment. Again, it implies there is a direct link between theory and practical.

Grade Point Average of Students after their Industrial Attachments

Table 13. Grade Point Average

Performance	Frequency	Percentage
High	21	63.6
Average	12	36.4
Total	33	100

Source: Field work (2018)

The study found in table 13 that majority (63.6%) of the students had a high GPA after their industrial attachments. Also, about (36.4%) of the students had above average GPA after their industrial attachment. This information gives the impression that students GPA have gone up after

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their industrial attachment, this implies that industrial attachment has contributed high enough in student performance.

4. Conclusions

The good linkage between what students learn in school and what the industry does is a good sign for preparing students to meet the world of work. This again, indicates that the school (training institution) for study prepares the students well. The dissenting views of some students (60.6%) not expecting anything new from the industry means that they perceive what they learn in school is not different from what they learn from the industry. Therefore what will be the need for industrial training? It could also mean that the students have no objectives going for industrial attachment so they decide not to learn new things.

Student given specific work to do during industrial attachment and supervise by the work based supervisors shows that students were given training which will prepare them to face the industry demands after school. Student supervised well by the supervisor will help the student to acquire knowledge and skills. The Grade Point Average (GPA) of student can be improved if much attention is given to student industrial training.

5. Recommendations

Although there is good linkage between what students learn in school and what goes on in the industry, the linkage should be strengthened by stakeholders from the training institutions and the industry. This can be done by the institution finding out from the industry their demands in terms of student training.

Students should be encourage by the lecturers to have an objective for industrial attachment so that they will remain focus and learn new thing from the industry.

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The authorities in the training institutions should find means of motivating supervisors from the industry so that they will supervise the students well to acquire the needed skills. The motivation could be in the form of letter of appreciation and other souvenirs.

Students report from the industry should be properly assessed and discussed in class. This will make students aware of the need to learn during industrial training. This will help students to improve on their grade point Average (GPA).

References

Abraham S. F. (n.d). Quantitative Research Method. Nova Southeastern University.

Aditham, B. R. (2008) Research Methodology for Management and Social Science. 1st Edition.
New Delhi. Anurag Jain for Excel Books.

Afida, A .N. J., Osman, S. A., Omar, M. Z., Kofli, T. and Jojar, S. (2013). Undergraduate Industrial Training Experience: A Win-Win Situation for Students, Industry and Faculty. Social And Behavioral Science 102 (2013) 648-653. 6th International Forum on Engineering Education .

Ayarkwa, J. Adinyir, E and Osei- Asibey, (2012). Industrial Training of Construction Students: Perception of Training Organizations in Ghana. Education + Training, vol. 54 issue: 2/3, pp234-249,

Ann, B. (2012). What is Teaching? Retrieved from: <https://www.quora.com/What-is-teaching>.

Berkeley Center for Teaching & Learning (2018). What is Learning? Retrieved from:
<https://teaching.berkeley.edu/resources/learn/what-learning>.

4th International Academic Conference on Teaching, Learning and Education

Cross, K. P. (1987). Teaching for Learning. Retrieved from: <https://eric.ed.gov/?id=ED283446>.

Dharmaraj, W. (n.d). Learning and Teaching. Bharathidasan University. Tiruchirappalli. P.4

Fraenkel, J. R. Wallen, N. E. and Hyun, H. H. (2012) How to Design and Evaluate Research in Education (Eighth Edition). NY: McGraw-Hill. Pp 427– 428

Hwang, N.G.B. and Thim, L.Y. (1995). Industrial Attachment Programme in Engineering: The NTU Experience. International Journal of Engineering. Ed. Vol 11. Pp 232-233.

Idea Group Inc. (2018). What is Teaching? Retrieved from:

<https://www.igi-global.com/dictionary/teaching/29344>

Kumekpor, T. K.B. (2002). Research Methods & Techniques of Social Research. (Revised) Edition. Adenta, Ghana. SonLife Printing Press & Service.Pp – 132-188

Kay, B. (2018). The Strengths and Weaknesses of an Internship Experience. Retrieved from:

<http://work.chron.com/strengths-weaknesses-internship-experience-7184.html>

konsky, C. (1982). Internship in speech communication: A National survey and commentary, Association for Communication Administrators Bulletin. P.39-51.

Leedy, P. D. and Ormrod, J. E. (2005). Practical Research: Planning and Design. Eight Edition. New Jersey. Person Education. Inc. Pp. 202-206.

Muzaffar Syah Mallow (2014). Benefits of Industrial Attachment for Law Students. Universiti Sains Islam Malaysia

4th International Academic Conference on Teaching, Learning and Education

Megat Mohd Nor, P.N.S. and Ismail, S. (2015). Effect of Industrial Training on Academic Performance: Evidence from Malaysia. *Journal of Technical Education and Training*. Vol. 7, No. 2. ISSN 2229- 8932

Matamande, W., Nyikahadzoi, L., Taderera, E., and Mandimika, E. (2011). In Investigation of the Effectiveness of Work Related Learning: A case of Industrial Attachment Programme offered by the Faculty of Commerce, University of Zimbabwe. *Journal of Instructional Pedagogies*

Mohamad, F. B. A. and Kamarul, A. A. R. (2011). Lecturers' Industrial Attachment Programme To Increase Lecturers' Soft Skills and Technology Competencies for Global Stability and Security. *Journal of Sustainability Development*. Vol.4. No. 1.

Nurfah, N. B. M. F. (2013). The Impact of Industrial Training Programme Towards Enhancing The Performance of Undergraduate Students. *University Teknikal Malaysia Melaka*.

Nyankang'i, E. (2015). Importance of industrial attachment/internships for students or interns.

Retrieved from <http://kenyayote.com/importance-of-industrial-attachmentinternships->

[for-students-or-interns](http://kenyayote.com/importance-of-industrial-attachmentinternships-)

Obasi, R. (2015). The Impact of Industrial Training on Students' Academic Performance.

Advances in Social Science Research Journal. Vol. 2, N0.6. DoI: 10.14738/assrj.26.1197.

Osam, S. E. (2010). A Report on Student Compulsory Supervised Industrial Attachment at the Techiman Holy Family Hospital. Retrieved from



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<http://essphill.blogspot.com/2012/08/a-report-on-two-month-industrial.html>

Student Industrial Attachment Programme (n.d). A “work-based experience programme”

Retrieved from:

www.bing.com/search?q=industrial+attachment&form=EDGSPH&mkt=en-

Sequeira, A. H. (2017). www.researchgate.net/publication/272620585