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Cross Job Transferability Skills Required by Technical and Vocational Education Graduates for Curbing Unemployment in Niger State

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#### Abstract

This study was designed to determine the cross job transferability skills required by Technical and Vocational Education graduates for curbing unemployment in Niger state. The study adopted a descriptive survey research design. A total of 50 respondents comprising of ten (10) Technical and Vocational Education lecturers in Federal University of Technology, Minna, twenty (20) Technical and Vocational Education graduates already working in Niger state, and twenty (20) employers of labour. Two research questions guided the study. The instrument for data collection was a five point scale questionnaire titled: Cross Job Transferability Skills Questionnaire (CJTSQ). Mean and standard deviationwere used to answer the research questions. Findings revealed that: Appropriate expression of feelings, understanding and respect of the feelings of others; working effectively and productively with others; and defining and accepting individual and group roles and responsibilities are among the required transferable skills needed for cross job mobility of Technical and Vocational Education graduates. It was also discovered that redesigning programmes to include content that are vocationally oriented; and allowing students to discover and develop skills by themselves are techniques for improving the acquisition of cross job transferability skills of technical and vocational education graduates. It was therefore recommended that greater recognition and promotion of transferable skills to enhance flexibility in cross-occupational mobility should be encouraged in Technical and Vocational Education. Also, teachers and employment facilitators should help Technical and Vocational Education graduates recognise and understand their transferable skills.

Keywords: Transferable skills, cross job mobility, unemployment and technical and vocational education graduates.

#### Introduction

Technical and Vocational Education is of paramount importance for everydeveloping and competitive economy. International and regional developmental organizations as well as many other countries are now focusing on Technical and Vocational Education to boost their economy and promote equity. It is obvious that the adequacy of skilled workforce is a major determining factor in economic and technological growth.One of the most significant aspects of Technical and Vocational Education is its inclination towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. Technical and Vocational Education delivery systems are therefore structured to trainworkers that the nation needs to create employment for the youth in order for them to become productive and contribute to the development of their society and the nation at large. But in recent times youth unemployment is increasingly becoming a source of worry in many parts of the world. Unemployment is the condition or situation where person or group of persons are without jobs (Adebayo, 2013). International Labour Organization (ILO) (2007), see unemployment as the number of economically active population who is without work but available and seeking work, including people who have lost their jobs and those who have voluntarily left work. Unemployment rates among youths have soared since the Great Recession of 2008, doubling that of the adult population in many developed and developing countries. In spiteof numerous policies and programmes initiated to address this issue,

available statistics show that unemployment is on the increase yearly. According to Adebayo, (2013), there are many root causes of unemploymentin Nigeria and lack of relevant skills as one of such causes. Therefore, the importance of skills development in today's knowledge economy is undeniable. Skills development is a crucial factor and determinant of human capital accumulation, labour productivity, poverty reduction, and growth. It is a comprehensive and cross-sectorial issue that continues tooccupy a central place both in the education and labour market areas, as well the public and privatesectors in both developed and developing nations alike.

The analysis report by NCVER (2016) reveals that many traditional industries, especially in manufacturing, have declined and are increasingly being replaced by service-oriented sectors such as health care, telecommunications, education, hospitality and retail. This transformation has resulted in employment loss and the need for new work in vastly different occupations; for example, automobile manufacturing workers seeking new employment in hospitality. Furthermore, the decline and growth in the various sectors and occupations varies between regions, presenting different types of crossoccupational mobility challenges. Nigeria, like many other industrially and developing economy, is also undergoing economic and industrial transformation. As a result, some established industries, notably manufacturing, have declined, while others have grown and new ones have emerged. The inevitable consequence of this transformation has been massive job losses, as currently witnessed in the (impending) closure of the automotive industry, smelters and oil refineries, and the retraction of the mining sector, among others. The labour market in both developing and developed countries is changing. These changes have many underpinning's some of which include demographic, economic, technological and environmental factors. For countries like Nigeria, graduateshave to cope with these changes and compete regionally and globally, they need to address the emerging skill needs taking into account their respective economic strengths and potential.

Employer surveys indicate that occupation-specific skills are no longer sufficient for graduates to meet the needs of national labour markets (OECD, 2013). Nowadays the skills that employers demand from the graduates are changing, with soft skills replacing technical ones (Grugulis& Vincent, 2009). Soft skills also known as transferable skills have strategic roles in determining someone success in his works (Wagiran, 2012). It is particularly true for the technical and vocational education graduates. Graduates with adequate transferable skills can think on their feet, solve problems, lead a group through teamwork exercises, give critical feedback, motivate fellow employees and set an example for the rest of the workforce (Barski, 2012). Theses transferable skills are those skills that can be adapted to different jobs, occupations and industry settings that is, cross-occupational mobility in times of industrial restructuring. Transferable skills are defined by UNESCO (2012) as essential skills to apply and to retain one's work. They require a broad range of skills that can be transferred and adapted to different work needs and environments. Transferable skills include analyzing problems and selecting appropriate solutions, communicating ideas and information effectively, being creative, showing leadership and conscientiousness, and demonstrating entrepreneurial capabilities. Abbas, Kadir, and Azmie (2013) also described transferable skill as having a wide variety of basic knowledge, values, and life skills that are necessary to obtain and to keep a job. These skills are applicable and transferable in different vocational and social environment. Transferable skills are the very important skills sought after by employers from their job applicants. These skills are perceived as "must have skills" and more crucial than the technical skills. The importance of transferable skills, especially in the 21st century is not only for working but also for personal growth and quality of life (Vickers, 2014). These skills, once acquired or developed by the learner, can be transferred into different vocational or non-vocational areas, with the potential to facilitate the occupational mobility of graduates, providing them with the flexibility to change jobs across a wide range of occupations.

The findings of National Quality Council (2010), Skills for Jobs (2013) and European Commission (2013) supports the view that transferable skills perform an invaluable role in a graduates' cross-occupational mobility especially in this era of lack of jobs. Cross job occurs in a range of levels and occupational mobility especially in this occupational mobility can take place in the organisation in which they are contexts. For many workers, this occupation to another they are able to draw upon similar types of skills. In employed: as they move from one position to another they are able to draw upon similar types of skills. In other cases, it may involve changing employers but gaining employment in a like occupation in the same other cases, it may involve that is in an individual's hometown or a completely different geographical or similar industry, whether that is in an individual's hometown or a completely different geographical or similar industry.

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area (Atkinson & Hargreaves 2014; Productivity Commission 2014). In a situation where a graduate is able to use the skills they gained in one occupation to acquire a job in a very different occupation, but which partially relies upon their existing skills (Quintini&Venn 2013). The importance of transferable counsellors and labour market analysts (European Commission 2013; National Quality Council 2010; Misko 1999; Perkins & Salmon 1988; Subedi 2004).

The barriers and enablers to skills transferability are both objective and subjective. As other studies have demonstrated, not all skills are transferable and much depends on the generic aspect of the skill. This similarities and differences between occupations and their knowledge and skill requirements. It is well (Weeden 2011; Kim 2013). Skill transferability is more easily achieved between occupations where education. While transferable skills may have an objective quality to them at a more subjective level, they may rely upon them, or the employment facilitators who seek to assist the workers to find alternative

The lack of transferable skills of Vocational and Technical Education graduates especially in developing countries oftenlead to the failure in the world of work. For Instance, the competitiveness of vocational-school graduates areoften not significantly better than their peer competitors from generalschools when entering the job market. In many cases employers tend not to grant priority to vocational schoolgraduates regardless of their acquisition of occupational-specific skills. The important role of transferable skills in today's working environment makesits acquisition indispensable. It is needed to overcome various and complexworking tasks and challenges in different contexts.

This study arose from concerns that Technical and Vocational Education graduates find it difficult in getting jobs inreality of the changing labour market demands. The major industrial transformation that has taken place in this country in recent decades has resulted in the decline of some established industries for example, manufacturing industries and the growth of health and community services, simultaneously causing job loss and skills shortages. It has been argued that situations such as cross-occupational mobility provide the vital flexibility thatenablesemployers and workers to meet varying employment demands (Bernhardt et al. 2001; Sabirianova 2002). This calls for a clear understanding of the concept and potential for cross-occupational skills transferability between declining and growing occupations. A particular emphasis of the study is on the transferable required for cross-occupational mobility during times of industrial restructuring. Graduatesmay possess transferable skills to some degree but their awareness and understanding of these skills varies considerably, which limits their ability to see how these skills can be applied to different occupational contexts. Therefore, this study sought to determine cross job transferability skills and how they can be managed during cross occupational mobility and the ability of the Technical and Vocational Education system to produce transferable skills can help curb the panacea of unemployment in Nigeria.

### Theoretical Framework

**Transfer of learning** is the dependency of human conduct, learning, or performance on prior experience. The notion was originally introduced as *transfer of practice* by <u>Thorndike</u> and <u>Woodworth</u> (1901). They explored how individuals would transfer learning in one context to another, similar context – or how "improvement in one mental function" could influence a related one. Their theory implied that transfer of learning depends on how similar the learning task and transfer tasks are, or where "identical elements are concerned in the influencing and influenced function", now known as the *identical element theory*. Today, transfer of learning is usually described as the process and the effective extent to which past experiences (also referred to as the *transfer source*) affect learning and in a new situation (the *transfer target*) (Ellis, 1965).

Transfer of training is effectively and continuing applying the knowledge, skills, and/or attitudes that

# Methodology

Methodology The design adopted for this study was a descriptive survey research design. A descriptive survey design is a because of its high degree of representative The design adopted its high degree of representativeness and the ease in which a researcher could obtain selected because of its high degree of representativeness and the ease in which a researcher could obtain selected because error of the participants' opinion (Polit& Beck 2004). The population of the study comprised of Technical and the participants of the participants of the population of the study comprised of Technical and Vocational Education graduates and lecturers and employer of labour in Niger state. The sample size of the study comprised of Technical and the study comprised of Technical and Vocational Education graduates and lecturers and employer of labour in Niger state. The sample size of the Studyer of Studye Vocational Determined with the sample size of the s study was 50, manual of the only (10) recurical and Vocational Education lecturers in recuration in Viger state as well as twenty (20) Technical and Vocational Education graduates already University of a state as well as twenty (20) recunical and Vocational Education graduates arrows working in Niger state as well as twenty (20) employers of labour in Niger states. They were selected using simple random sampling technique. A five point scale questionnaire was the instrument used for collection of data from the respondents which consists of section A and B. The 5-point scale item was rated: Very Highly Required (VHR), Highly Required (HR), Required (R), Slightly Required (SR) and Not Required (NR) for section A and Strongly agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD) and Undecided (U) for section B with numerical values of 5,4, 3, 2 and 1. The instrument was face validated by three experts in Electrical Electronics in Federal University of Technology, Minna and their comments and suggestions were considered in preparing the final draft of the instrument. The reliability of the instrument was established by trial testing using Technical and Vocational Education graduates, lectures and employers in Niger State. Cronbach Alpha was used to determine the internal consistency of the items in the instrument. A reliability coefficient of 0.89 was obtained. The instrument was administered and the data collected were analyzed using mean and standard deviations to answer the research questions. The decision rule for the research question was based on real limit of values. Items with mean responses within the range of the real limit of values: 4.50 to 5.00, 3.50 to 4.49, 2.50 to 3.49, 1.50 to 2.49 and 1.00 to 1.49 and were remarked as VHR, HR, R, SR and NR respectively for section A and section B the cut off point to accept or reject an item was fixed at 2.45. Therefore, any item that has a mean score of 2.45 and above was regarded as agreed while any item below 2.45 was regarded as disagreed.

#### Results

Research Question 1: What are the cross job transferability skills required by technical and vocational education graduates for job mobility?

Table 1: Mean and Standard Deviation of Cross Job Transferability Skills Required by Technical and Vocational Education Graduates for Job Mobility

S/N	Transferable Skills Required	X	SD	Decision
COMM	MUNICATION SKILLS			Decision
1.	Speaking effectively	4.85	0.38	VHR
2.	Writing concisely	4.69	0.46	VHR
3.	Listening attentively	4.51	0.61	VHR
4.	Facilitating group discussion	4.72	0.63	VHR
5.	Providing appropriate feedback	3.99	0.57	HR
6.	Negotiate with others	4.31	0.56	HR
7.	Perceiving nonverbal messages	3.79	0.81	HR
8.	Use a variety of media formats to present information	3.93	0.84	HR
	imaginatively			
9.	Reporting information	4.18	0.78	HR
10.	Use various forms and styles of written communication	4.66	0.56	VHR
11.	Knowledge of Foreign languages	3.96	0.52	HR
12.		3.82	0.69	HR
RESEA	RCH & PLANNING			
13.	Forecasting and predicting future patterns	4.26	0.74	HR
14.	Creating ideas	3.82	0.68	HR
15.	Identifying problems	4.25	0.54	HR
16.		3.91	0.56	HR
17.	Imagining alternatives	3.88	0.61	HR
	Identifying resources	4.16	0.65	HR
18.		4.08	0.66	HR
19.	Solving problems			

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were learned in a learning environment to the job environment. Closely related to this concept is Transfer of Learningthe application of skills, knowledge, and/or attitudes that were learned in one situation to another learning situation (Perkins, 1992). This increases the speed of learning. The first place to practice transfer of learning is within the classroom. This makes it much easier to transfer new skills and knowledge to the job. Transfer of learning is the influence of prior learning on performance in a new situation. If students are not able to transfer some of the skills and knowledge from prior learning, then each new learning situation would start from scratch. Some educators y think of transfer of learning (or transfer of training) in terms of the classroom to the job environment; however they fail to realize the importance of *task variation* within the classroom. That is, practicing on a variety of tasks will enhance and quicken the learning process as compared to practicing in the same category or class. This helps the learners to become accustomed to using their newly acquired knowledge and skills in novel situations, thus encouraging transfer of learning to the job.

Transfer of learning is a phenomenon of learning more quickly and developing a deeper understanding of the task if we bring some knowledge or skills from previous learning to a new learning situation. Therefore, to produce positive transfer of learning, there is a need to practice under a variety of conditions and environments. Hence, classrooms and other learning environments become sterile of transfer of learning. And since the learners have no practice in transferring their newly acquired skills and knowledge in the classroom, they have trouble transferring their learning when they return to the job as most work environments are neutral towards the transfer of new skills (that is, they do very little to encourage the transfer of learning. Transfer of learning can be divided into two categories, Near and Far (Cree, 2000). Near transfer of skills and knowledge are applied the same way every time the skills and knowledge are used. Near transfer training usually involves tasks that are procedural in nature, that is, tasks which are always applied in the same order. Although this type of training is easier to train and the transfer of learning is usually a success, the learner is unlikely to be able to adapt their skills and knowledge to changes.Far transfer tasks involve skills and knowledge being applied in situations that change. Far transfer tasks require instruction where learners are trained to adapt guidelines to changing situations or environments. Although this type of training is more difficult to instruct (transfer of learning is less likely), it does allow the learner to adapt to new situations.

Transfer of learning was chosen as the most suitable learning theory for this work owing its effectiveness and continuing ability of applying the knowledge, skills, and/or attitudes that were learned in a learning environment to the job environment. It is suggested that transferable skills can be developed in a learning environment and then transfer to a work or job environment. Since students are responsible for their own self-realisation, self-assessmentand most importantly self-learning when learning skills, transfer of learning theory helps the learners to become accustomed to using their newly acquired knowledge and skills in novel situations, thus encouraging transfer of learning to the job.

### Purpose of the Study

The main purpose of this study is to determine examine cross job transferability skills of technical and vocational education graduates necessary for curbing unemployment in Niger state. Specifically it intends to:

- Determine cross job transferability skills required by technical and vocational education 1. graduates for job mobility.
- Determine the techniques for improving the acquisition of cross job transferability skills by 2. technical and vocational education graduates.

#### **Research Questions**

The following research questions were formulated for this study:

- What are the cross job transferability skills required by technical and vocational education 1. graduates for job mobility?
- What are the techniques for improving the acquisition of cross job transferability skills of technical and vocational education graduates? 2.

	. Setting goals and prioritize	3.91	0.51	HR
21	· · · · · · · · · · · · · · · · · · ·	4.22	0.55	HR
22		4.05	0.72	HR
	Predict future patterns	3.59	0.62	HR
24.		3.78	0.67	HR
INTER	RPERSONAL & TEAMWORK			
43.	Keep a group on track toward a common goal	4.82	0.36	VHR
4.57	AT BREADER REAL AND A CONTRACT AND A	4.84	0.37	VHR
<b>▲</b> /,	Interact effectively with peers, supervisors and supervisees in multiple contexts	4.69	0.47	VHR
79	Express failing			
40.	Express feelings appropriately and understand and respect the feelings of others	4.51	0.62	VHR
30	Make commitments to others and follow through	4.52	0.61	VHR
25 25 4	A PRIVATE ALL ALLER EXTRACTOR OF ANTONIO	4.64	0.71	VHR
37	Working effectively and productively with others	3.89	0.76	HR
33.	the shine in that monty with others	3.91	0.81	HR
34.		3.77	0.99	HR
2.40	Defining and accepting individual and group roles and responsibilities,	3.93	0.84	HR
35				
36	Respecting individual and group differences,	4.18	0.80	HR
50.	Identifying the strengths of team members, and building social relationships	3.97	0.65	HR
	K ETHIC			
	Accepting responsibility			
38	Implementing decisions	3.70	0.63	HR
	Cooperating	4.10	0.65	HR
	Enforcing policies	4.09	0.48	HR
	Being punctual	3.13	0.26	HR
	Managing time	3.88	0.60	HR
		3.97	0.78	HR
	Understanding and acting in accordance with moral and ethical principles	3.84	0.79	HR
44.	Identifying right and wrong and having the willingness			
45.	Determination and capacity to argue the case for change;	4.13	0.69	HR
46.	Understanding the place of ethics and values in human life;	3.62	0.76	HR
47	Acting with moral and ethical integrity;	4.22	0.41	HR
48	Acting with regard for others; and having a desire and capacity to	3.41	0.55	HR
40.	work for the common good.	4.21	0.57	HR
49.	Adaptability			
50.	Honesty	4.24	0.46	HR
51.	Integrity	3.91	0.71	HR
51.	÷ ,	3.99	0.75	HR
	Setting & meeting deadlines	4.11	0.66	HR
	NING & CREATIVE THINKING			
53.	Capacity to learn	4.19	0.78	HR
54.	Problem solving	4.22	0.80	
55.	Willingness to take a chance	4.00	0.30	HR
56.	Innovation & creativity			HR
57.		4.13	0.69	HR
	Critical personality	3.62	0.76	HR
58.	Self reliance and Independence	4.22	0.41	HR
59.	Self evaluating	3.41	0.55	HR
60.	Self control	4.21	0.57	HR
61.	Self directed	3.91	0.56	
62.	Self disciplines	3.88	0.50	HR
		2.00	0.01	HR

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63 64 65 66	<ol> <li>Generating an idea which is new to the individual,</li> <li>Seeing existing situations in a new way,</li> <li>Identifying alternative explanations</li> </ol>	4.16 4.08 3.91 4.22	0.65 0.66 0.51 0.55	HR HR HR HR
67		4.51	0.62	VHR
LIT	ERACY & NUMERACY SKILLS			
68.	Basic math skills,		0.4C	VIID
69.	Basic statistical skills,	4.69	0.46	VHR
70.	Analytical skills,	4.51	0.61	VHR VHR
71.		4.72	0.63	HR
72.		3.99	0.57	HR
73.	Media Literacy	4.31	0.56	HR
74.	Technology Literacy	3.79	0.81	
ODCA	NIZATION MANACEMENTS OF	3.93	0.84	HR
0KGA 75.	NIZATION, MANAGEMENT & LEADERSHIP			
76.		3.13	0.66	HR
70.		3.88	0.60	HR
78.	Managing groups	3.97	0.78	HR
79.	Delegating responsibility	3.84	0.79	HR
80.	Analyze tasks and set priorities	4.13	0.69	HR
81.	Include others who will contribute to the solution of a problem or	3.62	0.76	HR
01.	task	4.22	0.41	HR
82.	Identify resources and materials useful in the solution of a problem	3.41	0.55	HR
83.	Motivate and lead others	4.21	0.57	HR
84.	Delegate responsibility for the completion of a task	4.09	0.48	HR
85.	Organize people and tasks to achieve specific goal	1.13	0.26	HR
86.	Managing conflict	3.88	0.60	HR
87.	Train and teach a skill/ concept/ principle to others	3.97	0.78	HR
88.	Initiate creative problem solving	3.84	0.78	HR
	0	5.04	0.79	

Analysis of mean responses of the respondents revealed that all items in Table 1 were adjudged as required with the mean values ranging from 3.59 to 4.85. From the analysis, it implies reveals that communication, work ethics, organization, management & leadership skills, literacy and numeracy skills, learning and creativity skills, interpersonal and teamwork as well as research and planning skills are the required transferable skills needed for cross job mobility of technical and vocational education graduates.

**Research Question 2:** What are the techniques for improving the acquisition of cross job transferability skills of technical and vocational education graduates?

Table 2: Mean and Standard Deviation of the Techniques for Improving the Acquisition of Cross Job Transferability Skills of Technical and Vocational Education Graduates

S/N	ITEMS	X	SD	DECISION
1.	Redesigning of programmes to include content that is essentially vocationally oriented. These include but are not limited to workplace problems and placement options internships, work experience, work-based learning initiatives, and work placement schemes	2.67	1.01	Agree
2.	The establishment of cross-faculty courses and research that is based on interdisciplinary research centres which seek to take an integrated approach to the development and acquisition of knowledge	3.01	1.04	Agree
3.	The promotion of programmes by higher education institutions that are geared towards marketing needs	3.55	0.95	Agree
4.	Greater focus on activities that assist with the employability of graduates	3.33	0.78	Agree
5.	Increased involvement of employers in programme development and the policy strategy and implementation stages of university activity	3.23	0.82	Agree
6.	Making on-the-jobtraining a requirement for graduate programmes such as TVE.	2.90	1.00	Agree
7.	Increased collaboration between technical colleges and traditional liberal arts institutions	2.66	1.01	Agree
8.	Adoption of some relevant teaching methodologies such as project-based learning, problem-based learning, competency based learning, research-based learning, experiential learning and scaffolding	2.71	1.19	Agree
9.	Employing hands-on activities/experience-based learning approach such as group studies, group discussion, apprenticeship, extracurricular activities, role model and using ICT in presentation should be integrated into TVE	2.85	0.89	Agree
10.	Making space for transferable skills in TVE as well as provision of conducive learning environments	3.11	0.94	Agree
11.	Teaching the Teachers, transferable Skills in Vocational Teacher Education (VTE)	3.40	0.85	Agree
12.	Incorporating transferable skills in TVET teacher policies and teaching requirements	2.80	0.99	Agree
13.	Support in implementing policies and teaching requirements into TVET practice	2.64	1.14	Agree
14.	Allowing students to discover and develop skills by themselves	2.85	0.89	Agree
15.	Utilizing innovative technology.	3.11	0.91	Agree
16.	Applying skills to real life situation.	3.16	1.01	Agree
17.	Engaging learners via varied instructional approaches	2.92	1.04	Agree
18.	Offering subjects such as entrepreneurship, leadership and other skills as optional courses	2.85	1.09	Agree
19.	Technical and Vocational Education students can develop these transferable skills through part-time employment, volunteer	2.97	1.07	Agree
20.	work and community participation Initiate work placements or work-based projects that will help students to develop employment-related skills within the context of real-world situations	2.79	1.03	Agree

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Analysis of mean responses of the respondents revealed that all items in Table 2 were adjudged as agreed to the mean values ranging from 2.64 to 3.55. From the analysis in Table 2 were adjudged as agreed Analysis of mean values ranging from 2.64 to 3.55. From the analysis, it reveals that transferable skills could with the mean values ranging and vocational education students the analysis, it reveals that transferable skills in the with the mean values ranging a only of to 5.55. From the analysis, it reveals that transferable skills could be acquired by technical and vocational education students through integration of transferable skills in the southurn, integration of transferable skills in the teaching and the teaching and the standard stand be acquired by technic of transferable skills in the teaching and learning process, employing real life curriculum, megenering context, by using relevant teaching and learning process, employing real me situation/case as learning context, by using relevant teaching methodologies, by using innovative

# Discussion

Discussion This study revealed the transferable skills required for cross job mobility by technical and vocational This study for care and study required for cross job mobility by technical and vocational education graduates includes communication skills, work ethics, organization, management & leadership education graduate and numeracy skills, learning and creativity skills, interpersonal and teamwork as well as skills and planning skills. This is in agreement with V skills, interpersonal and teamwork as well as research and planning skills. This is in agreement with You (2009) who suggests that transferable skills as the competencies required to solve problems, communicate ideas and think creatively and that vocational schools and colleges are encouraged to develop students that are able to adapt to different and changing work and life environments. World Bank(2011) explained that are able to adapt to different and enaugues non-vocational skills, such as teamwork, self-criticism, problem-solving skills or lifelong learning-skills and interpersonal skills that help people make informed decisions, solve problems, think critically and and interpretatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives in a healthy and productive manner. Many employers think that if graduates are able to use a skill in one situation, they should be able to use that skill in another job, even if the work appears to be unrelated to their past employment or educational experience. Also National Association of *Colleges and Employers Job Outlook Survey (2016)*, suggested the top 10 qualities/skills employers seek are transferable skills which are Leadership, ability to work in a team, written communication skills, problem-solving skills, verbal communication skills, strong work ethic, initiative, analytical/quantitative skills, flexibility/adaptability and technical skills. The finding of this study is also in agreement with the theory of transfer of learning, which suggests that transfer of learning is the effective and continuing applying of knowledge, skills, and/or attitudes that were learned in a learning environment to the job environment that is the application of skills, knowledge, and/or attitudes that were learned in one learning situation to a job environment (Perkins, 1992). This finding reveals the transferable skills required for cross job mobility by technical and vocational education graduates which imply that if these skills are acquired by technical and vocational education graduates, job mobility would be easier which will also help reduce the rate of unemployment in Niger state.

Furthermore, findings revealed ways in which transferable skills can be acquired by technical and vocational education graduates, it reveals that transferable skills could be acquired through integration of transferable skills in the curriculum, integration of transferable skills in the teaching and learning process, employing real life situation/case as learning context, by using relevant teaching methodologies, by using innovative technologies among others. This is in agreement with the findings of UNESCO (2014) who stated that the TVET curriculum needs to be reviewed to respond to these concerns and to reflect skills needed as expressed by industries, including transferable skills. That the TVET curriculum should encourage a self-directed approach and active development of competencies in work projects, also by raising teachers' awareness of existing guidelines and teachers' understanding of their applicability would be helpful. The current findings show different approaches to imparting transferable skills. Many teachers should shift from teacher-centred to student-centred approaches by engaging students in classroom activities that encourage them to use critical thinking and higher-order thinking skills. The use of group activities that stimulate teamwork skills and project-based and problem-based pedagogies should be more encouraged. This development is in line with the approach promoted by UNESCO which is that transferable skills should not be taught using traditional teaching but through consultative and more student-centred approaches. Also Vocation-specific projects, work-related tasks facilitated in real-work conditions are some of the important approaches that teachers should consider (UNESCO, 2014). Also this finding relates to the theory of transfer of learning as transfer of learning relates to the place to practice transfer of learning is within the classroom. This makes it much easier to transfer new skills and knowledge to the job. Transfer of learning is the influence of prior learning on performance in a new situation. Therefore the techniques for improving the acquisition of cross job transferability skills of technical and vocational education graduates starts from the learning environment in schools.

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#### Conclusion

The findings from this study lend further support to the view that transferable skills perform an invaluable skills relating to an individual's ability to operate effectively in the workplace) and generic hard skills are applicable to a range of occupational contexts. However, the differences associated with the particular some skills are more transferable in some occupational contexts. Occupational clusters such have and cross-occupational mobility. These clusters contain certain elements, such as skills transferability activities and desirable employee attributes, which are common to 'groups' of occupations across development of generic competencies, which can also be used across any occupation whereby helping the

#### Recommendations

Based on the findings of this study, the following recommendations were made:

- Greater recognition and promotion of transferable skills to enhance flexibility in crossoccupational mobility should be encouraged in technical and vocational education.
   Teachers and employment facilitators about the line in the interview of the states.
- Teachers and employment facilitators should help technical and vocational education graduates recognise and understand their transferable skills.
   Transferable skills should being manual bits in the standard stan
- Transferable skills should beincorporated into the curriculum as well as TVET teacher policies and teaching requirements.
   Teachers should act as the role model beincorporated into the curriculum as well as TVET teacher policies
- 4. Teachers should act as the role model because transferable skills are better inculcated through examples than through traditional teaching. In other words these skills should not be taught using traditional teaching style but through consultative and more learner-centred.
- 5. Schools should work in partnership with industry to systematically recognise skills and competencies in vulnerable businesses and the implementation of better processes for the formal recognition of skills gained on the job by graduates.
- 6. Improvements to the training system are required and, more specifically, to training packages, such that the skills developed are not only transferable within closely related occupations, but more broadly within the economy.
- 7. There should also be increased awareness and understanding of cross job mobility by graduates, training providers and job support agencies. This would ensure that decisions made during employment transitions, as well as advice given, are appropriate and relevant.

#### References

- Abbas, R., Kadir, F. A., & Azmie, I. A. (2013). Integrating soft skills assessment through soft skills workshop program for engineering students at University of Pahang: an analysis. International journal of Research In Social Sciences, 2(1), 33-46
- Adebayo, A. A. (2013). Youths Unemployment and Crime in Nigeria: A Nexus and Implications for National Development. International Journal of Sociology and Antropology, 5 (8), 350-357
- Atkinson, G & Hargreaves, J. (2014). An exploration of labour mobility in mining and construction: who moves and why. NCVER, Adelaide.
- Barski A. What Are Vocational Skills? 2012; Accessed 05 May, 2012. Available: <u>http://www.ehow.com/info\_8011804\_vocational-skills.html</u>.
- Bernhardt, A, Morris, M, Handcock, M. & Scott, M. (2001), Divergent paths: economic mobility in the new American Labor market, New York, Russell Sage Foundation.
- Ellis, H. C. (1965). The Transfer of Learning. New York: The Macmillan Company
- European Commission (2013). Transferability of skills across economic sectors by European Commission, Union Programme for Employment and Social Solidarity Progress (2007-2013).

🧳 4<sup>a</sup> International Conference of School of Science and Technology Education (SSTE), FUT, Minna October, 2016 🖷

- Grugulis, I. & Vincent, S. (2009). 'Whose skill is it anyway? Soft skills and polarization', Work, Employment and Society, vol.23, no.4, pp.597-615.
- International Labour Organization (ILO), (2013). EnhancingYouth Employability: The Importance ofCore Work Skills. Skills for Employment Policy Brief.From //www.ilo.org/skills/pubs/WCMS\_234467/lang-en/index.htm.> (Retrieved on 20
- Kim, Y. (2013) 'Diverging top and converging bottom: labour flexibility and changes in career mobility in the USA', Work, Employment and Society, vol.27, no.5, pp.860—79.
- Misko, J. (1999). The transfer of knowledge and skill to different contexts: an empirical perspective, NCVER, Adelaide.
- National Association of Colleges and Employers (NACE) Job Outlook Survey, 2016
- National Centre for Vocational Education Research (NCVER). (2016) Cross-occupational skill transferability: challenges and opportunities in a changing economy, NCVER, Adelaide.
- National Quality Council, (2010). Foundation skills in VET products for the 21st century, Published by National Quality Council.
- OECD and European Commission (2004). Career guidance: A handbook for policy makers, (OECD/European Commission, Paris).
- Organization for Economic Co-operation and Development. Education Policy Analysis (2001), Centre for Educational Research and Innovation, Paris: OECD; 2001.
- Perkins, D. N., (1992). Transfer of Learning. Contribution to the International Encyclopedia of Education, Second Edition. Oxford, England: Pergamon Press

Perkins, D. & Salmon, G. (1988). 'Teaching for transfer', Education Leadership, vol.46, no.1, pp. 22-3.

Productivity Commission (2014). Geographic labour mobility, Canberra.

- Quintini, G. & Venn, D. (2013). Back to work: re-employment, earnings and skill use after job displacement, Employment Analysis and Policy Division, OECD.
- Sabirianova, K. Z. (2002). 'The great human capital reallocation: a study of occupational mobility in transitional Russia', *Journal of Comparative Economics*, vol.30, no.1, pp.191-217.
- Skills for Jobs (2013). The Training and Skills Commission five-year workforce development plan, Better Skills, Better Work and Better State, Government of South Australia, Adelaide.
- Subedi, S. B. (2004). 'Emerging trends of research on transfer of learning', International Education Journal, vol.5, no.4, pp.591-9.
- Thorndike, E. L. & Woodworth, R. S. (1901) "The influence of improvement in one mental function upon the efficiency of other functions", *Psychological Review*
- Wagiran A., (2012). The Importance of Developing Soft Skills in Preparing Vocational High School Graduates. 2008.
- Weeden, K. (2001). 'Why do some occupations pay more than others? Social closure and earnings inequality in the United States' American Journal of Sociology, vol.108, pp.55—101.
- World Bank. (2011). Executive summary to Learning for All: Investing in People's Knowledge and Skills to Promote Development, Education Strategy 2020, Washington DC, World Bank.

- UNESCO-UNEVOC (2012) Strengthening TVET Teacher Education: Report of the UNESCO-. UNEVOC onlineconference Retrieved on December, 03 2013 from <u>http://unevoc.unesco.org/</u>
- United Nations Educational and Scientific and CulturalOrganization (UNESCO) 2014. Education: LearningEnvironment.
- You Y. N. (2009). Pre-employment skills development strategies in the OECD, SP Discussion Paper no. 0923, Washington DC, World Bank.
- Vickers, S. (2014). Embedding soft skills in programmes: the case study of 'Wider' KeySkills. Paper presented during the workshop on Integration of Transferable Skillsin TVET Curriculum, Teaching-Learning, and Assessment, Bangkok 13-14
- Vygotsky, L. S. (1980). Mind in society: The development of higher psychological processes. Harvard university press

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