

Examining Employability Skills Acquisition of Students in Some Ethiopian Universities through Legitimation Code Theory

Sara Jehi Oumer

Ph.D. Candidate, Department of Teacher Education and Curriculum Studies, College of Education and Behavioral Sciences, Bahir Dar University

Meskerem Lechissa Debele (Ph.D.)

Assistant Professor, Department of Teacher Education and Curriculum Studies, College of Education and Behavioral Sciences, Bahir Dar University

Amera Seifu Belayneh (Ph.D.)

Associate Professor, Department of Teacher Education and Curriculum Studies, College of Education and Behavioral Sciences, Bahir Dar University

Abstract

The purpose of this study was to understand the underlying principles of the acquisition of employability skills in some public Ethiopian Universities. Data were collected from 394 graduating students in the year 2021 from three Ethiopian Public Universities- Addis Ababa University, Arsi University, and Bahir Dar University. The study used Legitimation Code Theory to analyze the acquisition of employability skills. A questionnaire adapted from Maton and Howard (2016) was used to reveal legitimation codes underlying practices of employability skills acquisition. Another set of questions adopted from Nebraska University Transferable skills assessment was used to measure employability skills of students. Analysis of data was conducted using both mean and linear regression. The findings of the study revealed that all the four dimensions of specialization codes (knowledge, knower, elite, and relativist codes) are evident in the universities with regard to different sets of employability skills. The regression analysis has shown that employability skills of students can be explained by their legitimation codes.

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Introduction

Ever since Dearing's report (1997) on higher education in the learning society, employability became an agenda of higher education in the UK and internationally (Bridges, 2000; Hinchliffe, 2008). Since then, different employability definitions and frameworks have been developed. In all employability frameworks, employability skills are considered important, and different definitions have been forwarded. According to Singh et al. (2014), employability skills are one of the two factors in the employability equation, the other being hard skills or technical skills. Knight and Yorke (2003, p.5) defined employability as "a set of achievements—skills, understanding, and personal attributes—that make individuals more likely to gain employment

CONTACT Sara Jehi Oumer, email: sarajehi@yahoo.com

and be successful in their chosen occupations”. Their view of employability emphasized the importance of subject-specific understanding, generic social skills, meta-cognition, and self-theories. McQuaid and Lindsay (2005) also contributed to the discourse by analyzing the historical application of the term “employability. They argued that employability is derived and affected by both individual characteristics and broader social factors that influence one's capacity to get a job. Tomlinson (2012) raised the issue of supply-side critics about employability. No matter how hard universities attempt to develop graduates’ employability skills, it may not automatically lead to graduate employment. Nevertheless, a great deal of responsibility is laid upon Higher Education Institutions by supply-side approaches to increase graduate employability.

According to Lowden et al. (2011) employability skills are needed by almost everyone to do a job. For Lowden et al., employability skills enable individuals to utilize the more specific knowledge and technical skills that are needed in specific workplaces. Earlier, the term “employability skills” was used to refer to those skills which are vocational and job-specific. Nowadays, the term became broad enough to include a variety of attributes, work habits, and workplace success. They are skills that are needed not only in the workplace but also in daily living and social contexts. Further, employability skills are part of broader discourse premises around the need to provide greater linkages between the education community and the employment community (Kwok, 2003). One of the reasons why employability skills are valued is because they apply to many careers and also help to meet the needs of varieties of occupations (Saterfiel & Mc Larty, 1995). According to the Allen Consulting Group Report (2006, p.11), employability skills are also known by the name “key skills, core skills, life skills, key competencies, necessary skills, and transferable skills.” In this study, these terminologies are used interchangeably.

There is lack of conceptual and theoretical frameworks for employability skills (Barrie, 2012); and the concept is undertheorized (Bester et al., 2018). This has made the issue partly a concern of epistemology. Brown and Hesketh (as cited in Tomlinson, 2008) showed that employers are becoming less interested in academic credentials and more interested in the personal attributes and skills of graduates. However, this preference comes with some drawbacks. Green and associates (2009) also point out that there is significant confusion about the definition and implementation of generic graduate skills. The nebulous nature of generic employability skills may have led to the problem of their acquisition. Holmes (1998) doubts the very notion of transferable key skills and the methodologies allegedly distinguished to develop them. Canning (2013) also stated that the idea of generic graduate skills has grown fuzzy, and the literature is simply advocatory—describing their importance than defining what constitutes them or how they are acquired. Hence, there is a wide gap in understanding the underlying principles behind employability skills acquisition by graduates of higher education.

Current Discourse on Employability Skills in Ethiopia

The global nature of higher education and the drastic expansion of universities in Ethiopia invited employability skills to become the country’s agenda. A recent discourse from the Ethiopian Ministry of Education (MoE) raised the issue of graduate employability as a new means of regulating university success. MoE (2017) stated that 80% of university graduates have to be

employed within a year. The Ethiopian Higher Education Quality and Relevance Association (HERQA, 2013) also listed the institutional generic aim of a Bachelor's Degree program. The employability skills mentioned include competence in the field of study, creativity, innovativeness, sensitivity, and responsiveness towards community, culture, and environment, problem-solving skills, teamwork and communication skills, leadership skills, entrepreneurial skills, ICT, and lifelong learning (p. 4). Our study adopted the employability skills framework developed by American Research Institute, AIR (2015), because of its clarity in the categorization of the skills. The framework categorizes employability skills into three broad domains: applied knowledge, effective relationships, and workplace skills. Applied knowledge comprises critical thinking skills and applied academic skills. Effective relationship embraces interpersonal skills and personal qualities such as flexibility. Workplace skills include resource management, information use, communication skills, systems thinking, and technology use.

Empirically, little is known about the practice of employability skill acquisition in Ethiopian universities. There is a lack of evidence on which employability skills are acquired by students and how. To what extent Ethiopian university instructors embed employability skills in their courses is also not known, and the organizing principles underlying the acquisition of employability skills are not clear. The studies conducted in Ethiopia and most studies elsewhere on graduate employability focus on assessing graduate outcomes. Graduate outcome studies, such as tracer studies, usually measure what happens after students finish their programs and graduate. Such studies may divert the energy from efforts to develop graduates' employability skills (Harvey, 2001; Knight & Yorke, 2003). Employability measures should emphasize the overall experience of students in the development of employability attributes. This can indicate where the process can be improved (Harvey, 2001).

In addition, the different studies conducted on employability lacked a way to see how employability skills are thought to be developed by university students. The studies lack a theoretical framework through which the mechanisms behind employability skills acquisitions are revealed. This study is based on the premise that analyzing employability skills acquisition using Legitimation Code Theory (LCT) can help identify the organizing principles underlying employability skills acquisition. It investigated employability skills acquisition in three Ethiopian public universities using the Legitimation Code Theory as a guiding conceptual framework.

Conceptual Framework: Legitimation Code Theory (LCT)

Legitimation Code Theory (LCT) is a multi-disciplinary conceptual framework developed by Maton (2014). The framework draws insight from philosophy, linguistics, physics, anthropology, cultural studies, and, more directly, sociology. Maton (2014) specially built on Pierre Bourdieu's "field theory" and Basil Bernstein's "Code theory." Bourdieu (1996) introduced the concept of "a new gaze" or a "sociological eye" that goes beyond what is immediately observed in fragmentation and adopts a holistic view of the social world. According to Maton (2016a), such gaze involves "a break with thinking in terms of separate and visible empirical entities in favor of a realist and relational mode that conceives phenomena as realizations of underlying organizing principles" (p. 6).

Bernstein (1964) on the other hand, popularized two types of language codes—restricted and elaborate codes—which he used to explain differences in language use between learners from different social classes. Bernstein observed that learners from lower socio-economic backgrounds use restricted codes which depend on background knowledge and shared understanding they gain through their socialization process; whereas, learners from middle-class backgrounds use both restricted and elaborate codes. The use of elaborate codes does not assume the presence of prior knowledge and understanding, and therefore, spells everything out thoroughly without condensing meaning and expressions.

Maton (2014; 2016a; 2016b) combined Bourdieu's Field Theory and Bernstein's Code Theory to develop the Legitimation Code Theory (LCT). LCT goes beyond the two sociological theories to apply Code Theory to diversified fields and practices than just pedagogy or language. LCT also adopts a relational view of codes instead of assuming a segmentalist stance when studying separate phenomena under a sociological "gaze."

Ingold and O'Sullivan (2017) state that LCT observes the world and inquires about how people in various aspects of their lives use and teach information to others. According to Maton (2016a), Legitimation Code Theory (LCT) provides a collection of concepts that are used in empirical research to explain problems. LCT assumes that actors affirm legitimacy for what they are doing or for the organizing principles embodied by their actions. In every period, within every intellectual field, practices are underpinned by implicit organizing principles which give legitimacy to actors and their claims of what counts as realizations of valid knowledge.

When applied to higher education, Clarence (2016) affirms that Legitimation Code Theory (LCT) is a framework with strong explanatory power in its ability to conceptualize disciplines in terms of both knowledge and knowers. The tools it offers can help both academic development practitioners and disciplinary educators to analyze and change pedagogical practice in higher education. Maton (2016b) argues that for almost half a century, social constructivism has subjugated the field of sociology of education in the appearance of the theories, such as critical theories, post-theories, progressivism, constructivism, and so on. Studies of psychological and sociological approaches in educational research have undoubtedly contributed a great deal to educational thinking and are highly important. Nevertheless, studying only either knowing or knowers limits the variety of positions actors see as legitimate within educational research, and, consequently, what is fundamentally missing will be the study of knowledge itself (Howard & Maton, 2011). Maton (2014) further argues educational research and policy have not considered research into knowledge as an object (what is being learned) as the fundamental knowledge base of educational research and policy.

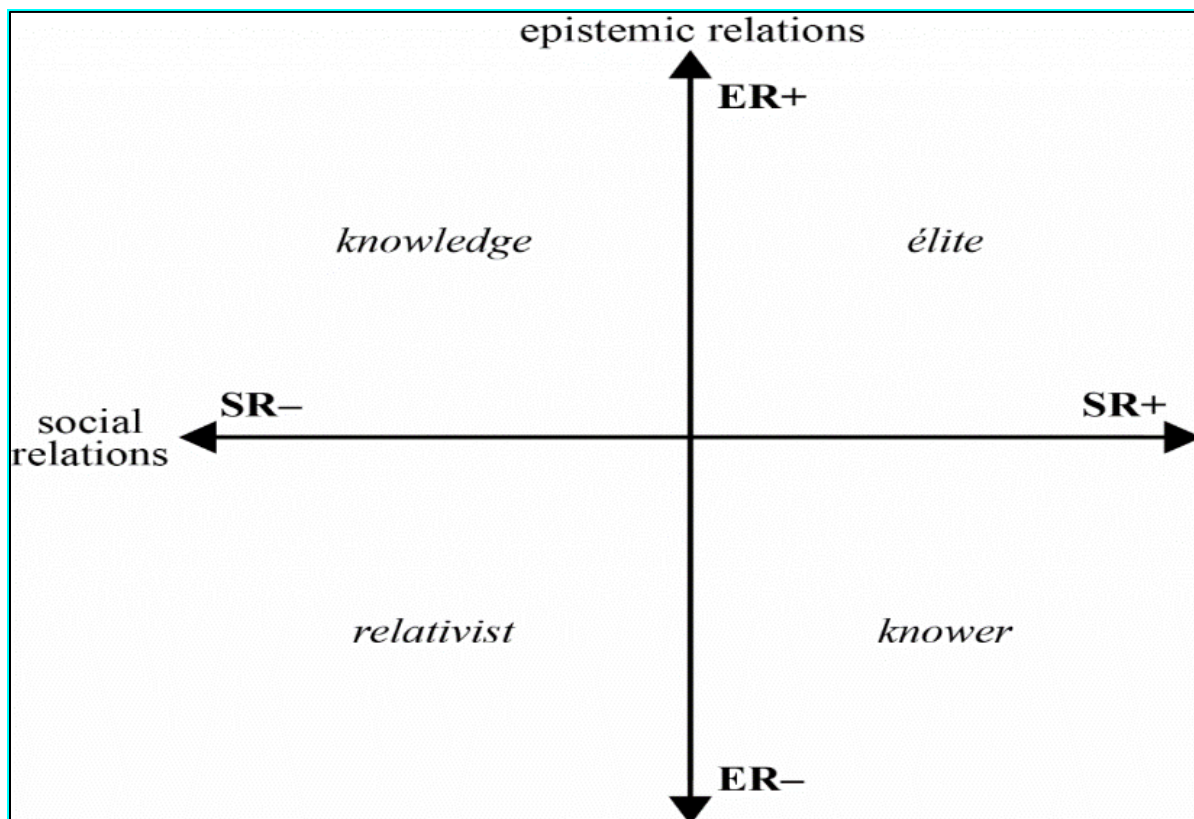
Our study explored the organizing principles underlying employability skill acquisition using the Legitimation Code Theory. Several reasons make researching employability skill acquisition using Legitimation Code Theory important. The first reason is conducting educational research using LCT helps to fill the 'knowledge blindness' gap by analyzing relations university students make within knowledge, it is possible to identify rules of the game about employability skill acquisition which might inform policy-making concerning employability skill acquisition in the Ethiopian Higher Education context. The second reason is related to its contribution to

knowledge building; studies that are done using LCT contribute to the improvement of the framework itself because LCT is an emerging framework. The third reason is employability skill acquisition is a current important agenda in the Ethiopian context because the massification of higher education is producing a huge number of graduates every year making the labor market very competitive. Due to the excess supply of labor, the acquisition of employability skills by graduates is very important for success in the competitive labor market. Research on employability skill acquisition in the Ethiopian context is scant, and there are no studies that address graduate employability skills by assessing Ethiopian Higher education using Legitimation Code Theory as a framework. We hope this study contributes to filling this gap.

Legitimation Code Theory has five dimensions: Specialization, Semantics, Autonomy, Temporality, and Density. Of all these dimensions, specialization is the first developed and more elaborated dimension. It is also used more in studies. Specialization as a dimension of LCT understands practices following a knowledge-knower structure. The concept of specialization “begins from the simple premise that practices are about or oriented towards something and by someone” (Maton, 2016a, p. 13). As in any educational practice, employability skills practice could be affected by the conceptions that actors have about employability skills acquisition. The dimension mainly offers a chance to analyze what students think as valid employability skills and how they define their relationship with the employability skill.

Figure 1

The Specialization Plane (Maton, 2016a, p. 13)



The specialization dimension offers analysis through epistemic and social relations. Maton (2016a, p. 12-13) distinguished between the two as follows: “Epistemic relations (ER) refers to the relationship between practices and their object (the part of the world towards which they are oriented); and social relations (SR) between practices and their subject, author, or actor (who is enacting the practices)”. Depending on how strongly (+) or weakly (-) each relation is emphasized as the legitimate basis of practice, beliefs, and identity, four types of specialization codes are generated (ER+, ER-, SR+, and SR-). As shown in Figure 1, these continua of strengths can be visualized as axes on a specialization plane, their quadrants indicating four principal modalities: knowledge codes, knower codes, elite codes, and relativist codes. Maton (2016a) described them as follows.

Knowledge codes (ER+, SR-), are where possession of specialized knowledge, principles or procedures concerning specific objects of study is emphasized as the basis of achievement, and the attributes of actors are downplayed; Knower codes (ER-, SR+), are where specialized knowledge and objects are downplayed and the attributes of actors are emphasized as measures of achievement, whether viewed as born (e.g. ‘natural talent’), cultivated (e.g. ‘taste’) or social (e.g. feminist standpoint theory); Élite codes (ER+, SR+), are where legitimacy is based on both possessing specialist knowledge and being the right kind of knower; and Relativist codes (ER-, SR-), are where legitimacy is determined by neither specialist knowledge nor knower attributes – ‘anything goes’ (pp. 13-14).

Specialization codes conceptualize rules of the game embodied in employability skill acquisition, practice, disposition, and contexts. So, what matters in the four codes about employability skills acquisition could be the knowledge about employability skills (knowledge code), the students (knower code), or both (elite code), or neither (relativist code). According to Maton (2014) specific code may be evident as the basis of achievement but may not be transparent, there may be code clashes and struggles by actors over which code is dominant. The dominant code may change for example between subject areas. These code shifts change the “rules of the game”. Therefore, the specialization code tries to identify which relation is emphasized in knowledge and educational contexts. The specific code which represents the unwritten “rule of the game” dominates every educational practice and context.

Hence, identifying these codes in employability skill acquisition practice in Ethiopian Universities provides a basis for a better understanding of the process of employability skill acquisition. For this purpose, this study is organized under the following research questions: (1) what Legitimation Code is predominant in some Ethiopian Universities concerning employability skills acquisition? (2) to what extent does the legitimation code of students explain their employability skills?

Methods

The paradigm of this research is critical realism which views reality as complex. Critical realism recognizes the role of both agency and structural factors in influencing human behavior.

Critical realism articulates that the mechanisms and events exist independently of our knowledge. According to Shannon-Baker (2016), critical realism tries to understand the relationship between factors by investigating context-based causality. It does this by examining the underlying factors that are potentially responsible for the social and physical phenomenon.

The study used a cross-sectional survey design of a quantitative research approach. Data were collected from 394 graduating students in the year 2021 from three Ethiopian Universities using a questionnaire.

Sample and Sampling Techniques

The target population for the study was graduating students from public universities in Ethiopia in the year 2021. Samples of the study were drawn from students who were graduating from Addis Ababa University, Arsi University, and Bahir Dar University in the year 2021. A total of 394 students were drawn using a stratified random sampling method from each university using the institutions as strata. Accordingly, 188 (from 3910 graduating) students from Bahir Dar, 115 (from 2420) students of Addis Ababa, and 91 (from 1924) students of Arsi University were included.

Data Collection Instrument

Data was collected using a questionnaire adapted from Maton and Howard (2016). They evolved a questionnaire for unfolding legitimation codes for specialization dimension in the context of technology integration for secondary education. The questionnaire for this research adopted the options that are used to unfold specialization codes of a given practice, not the main items. Research participants were asked what things are important about employability skills acquisition using a questionnaire with 32 items to explore the underlying principles dominating employability skills practice. Each question was provided with four options through which one can reveal the legitimation code underlying a given employability skill.

The overall reliability of the items that measure both the epistemic and social relation of the knowledge practice that measure the Legitimation code of university students was $\alpha=.91$ which was a very good reliability measure. The Kaiser-Meyer-Olkin Sample of Adequacy and Bartlett's Test of Sphericity of questionnaire measuring Legitimation Code of Students' Employability Skills, was $KMO= 0.84$, which indicates that patterns of relationships are relatively compact, therefore, factor analysis yields distinct and reliable factors. Consequently, factor analysis is appropriate for this data. Bartlett's test of sphericity also shows a value of <0.001 significance which indicates that there are some relationships between the variables we hoped to include in the analysis. The question items which were intended to measure the status of employability skills of university graduates were adopted from the Transferable skills assessment of Nebraska University. The adopted 44 items in the tool measure verbal communication skills, written communication skills, problem solving/critical thinking skills, analytical/research skills, planning and organization skills, interpersonal/ customer relation skills, leadership skills, quantitative/technology skills, creativity and innovation skills, team and collaborative skills. The skills were measured on a five-

point Likert scale ranging from not skilled to highly skilled. The Cronbach alpha reliability of the items that measure the status of students' employability skills was $\alpha = .94$. The Kaiser-Meyer-Olkin Sample of Adequacy and Bartlett's Test of Sphericity of questionnaire measuring employability skills of graduates $KMO = 0.92$, which indicates that patterns of relationships are relatively compact, therefore, factor analysis yields distinct and reliable factors. Consequently, factor analysis is appropriate for this data. Bartlett's test of sphericity also shows a value of <0.001 significance which indicates that there are some relationships between the variables we hoped to include in the analysis. Analysis of data was made using SPSS v25 through mean and linear regression.

Data Analysis Technique and Procedures

A grand mean and mean scores for each dimension of employability were calculated using SPSS v 25. To reveal legitimation codes, the difference between the grand mean and individual mean was used. A grand mean was calculated by averaging all the different sets of employability skills. Individual means were calculated by adding together two items for each set of employability skills. Each set of employability skills has two items for measuring *epistemic relation* and two items for measuring *social relation*. To reveal the *social relation* that students have with the practice of employability skills, the mean of two items was added together to form one single mean. To reveal *epistemic relation* the same strategy of adding the means of two items was used to get one single mean for each employability skills dimension. The difference between the grand mean and individual mean for each set of employability skills was used to plot the legitimation codes on the Cartesian plane. The difference between the grand mean and individual mean for items that measure epistemic relation was used to plot the y-axis on the Cartesian plane. The difference between the grand mean and individual mean for items that measure social relation was used to plot the x-axis on the Cartesian plane. A simple linear regression was conducted to predict the perceived employability skills of graduates using their legitimation codes.

Results

The main purpose of this study was to find out the Legitimation Codes underlying employability skills acquisition in three Ethiopian public universities. Accordingly, the collected data is presented and interpreted as follows. First, the mean scores and standard deviation (SD) of the data about the legitimate code of university students are presented, followed by the regression analysis.

Table 1 shows the descriptive statistics for the mean *epistemic relation* students have on different dimensions of employability skills. According to Maton (2000), epistemic relation is the relation between educational knowledge and its proclaimed object of study (that part of the world of which knowledge is claimed) (p. 154). In this case, it refers to the relation between concepts, theories, and procedures learned in a course and employability skills.

Students were asked how important learning content knowledge, theory, and concepts are in different courses. They were also asked about the importance of learning skills and procedures

in different courses for the acquisition of different sets of employability skills. The questionnaire was a 4-point Likert scale ranging from 1=, *not at all important*, 2= *not very important*, 3= *somewhat important*, and 4= *very important*.

Table 1

Epistemic Relation Mean of students on different Dimensions of Employability Skills

Employability Skills	Mean	Std. Deviation
Critical thinking skill	3.5205	.59665
Problem Solving skill	3.4679	.57553
Resource Management skill	3.3026	.72647
Interpersonal skill	3.2028	.74605
Academic skill	3.5344	.60112
Flexibility skill	3.3265	.68916
Communication skill	3.3708	.67849
Skill of information use	3.3508	.67189
Skill of Technology use	3.4331	.65100
Grand Mean for Epistemic Relation	3.3922	.43297

Table 1 above shows the mean of the students' responses on items that are supposed to reveal *epistemic relation* students have towards the acquisition of employability skills. As the table shows, the means of the students' responses on *epistemic relation* of the different skills are: critical thinking skills ($M= 3.52$, $SD= 0.59$), problem-solving skills ($M=3.47$, $SD=0.57$), resource management skills such as time management, money management, material and personnel management ($M= 3.30$, $SD=0.71$), interpersonal skill such as teamwork, leadership, respecting individual differences ($M=3.20$, $SD=0.75$), academic skill such as reading, writing, mathematical strategies and scientific principles ($M=3.53$, $SD=0.60$), personal quality skills such as flexibility, working independently, willingness to learn, integrity, professionalism ($M=3.33$, $SD=0.69$), communication skill such as verbal communication, communication in writing, comprehending written material, active listening, and careful observation ($M=3.37$, $SD=0.68$), skill of information use such as locating, organizing, using, analyzing, and communicating information ($M=3.35$, $SD=0.67$), and skill of technology use ($M=3.43$, $SD=0.65$).

The following table shows the mean for plotting *epistemic relation*; this data was generated by calculating the difference between individual means and the grand mean. According to Maton and Howard (2016), plots are determined by subtracting individual *epistemic relation* means from the grand *epistemic relation* means calculated for the y-axis. The y-plots categorize location of *epistemic relation* on the specialization plane.

Table 2*Epistemic Relation Mean to be plotted*

Employability Skills	Mean	Std. Deviation
Critical Thinking Skill	-.1301	.59665
Problem Solving Skill	-.0775	.57553
Resource Management Skill	.0878	.72647
Interpersonal Skill	.1876	.74605
Academic Skill	-.1440	.60112
Flexibility Skill	.0639	.68916
Communication Skill	.0196	.67849
Skill of Information Use	.0396	.67189
Skill of Technology Use	-.0427	.65100

The means calculated in Table 2 are used to plot the y-axis on the Cartesian plane to create the legitimation codes. The mean plot on the y-axis for critical thinking was ($y = -0.13$), for problem-solving skills ($y = -0.08$), for resource management ($y = 0.09$), for interpersonal skills ($y = 0.19$), for academic skills ($y = -0.14$), for flexibility ($y = 0.06$), for communication skills ($y = 0.19$), for the skills of information use ($y = 0.04$), and skills of technology use ($y = -0.04$).

Table 3 below shows the descriptive statistics for the mean of *social relations* students have on different dimensions of employability skills. According to Maton (2000), *social relation* is the relation between educational knowledge and its subject. In the context of this study, *social relation* is the relation between students and employability skills.

Table 3*Social Relation Mean for different Dimensions of Employability Skills*

Employability Skills	Mean	Std. Deviation
Critical thinking Skill	3.4923	.53941
Problem Solving skill	3.4182	.58481
Resource management	3.2987	.62396
Interpersonal skill	3.4452	.56670
Academic skill	3.2832	.65660
Flexibility Skill	3.3878	.61432
Communication skill	3.3721	.65668
Skill of information use	3.3128	.61449
Skill of technology use	3.3089	.61382
Grand Mean for Social Relation	3.3688	.40158

The mean of the students' response on items that are supposed to reveal *social relations* students have towards the acquisition of employability skills are presented in Table 3 above. Students were asked how important having natural talent and having personal experience are for the acquisition of different sets of employability skills. The questionnaire had a 4-point Likert

scale ranging from 1= *not at all important*, 2= *not very important*, 3= *somewhat important*, and 4= *very important*. As Table 3 above shows, the means of the students' response on *social relation* with respect to the skills were as follows : critical thinking skills ($M= 3.49, SD= 0.54$), problem solving skills ($M=3.42, SD=0.58$), resource management skill such as time management, money management, material and personnel management ($M= 3.30, SD=0.62$), interpersonal skills such as teamwork, leadership, respecting individual differences ($M=3.44, SD=0.57$), academic skill such as reading, writing, mathematical strategies and scientific principles ($M=3.28, SD=0.66$), personal quality skills such as flexibility, working independently, willingness to learn, integrity, professionalism ($M=3.38, SD=0.61$), communication skill such as verbal communication, communication in writing, comprehension of written material, active listening, and careful observation ($M=3.37, SD=0.66$), skill of information use such as locating, organizing, using, analyzing, and communicating information ($M=3.31, SD=0.61$), and skill of technology use ($M=3.30, SD=0.61$).

Table 4 shows the mean for plotting *social relation*. This data was generated by calculating the difference between individual and grand means of social relation. According to Maton and Howard (2016), social relation plots are determined by subtracting individual *social relation* means from the grand means of *social relations* and calculated for the x-axis. The x-plots categorize their location on the specialization plane.

Table 4

Social Relation Mean to be Plotted for Different set of Employability Skills

Employability Skills	Mean	Std. Deviation
Critical Thinking	-.1202	.53941
Problem Solving	-.0461	.58481
Resource Management	.0734	.62396
Interpersonal skill	-.0731	.56670
Academic skill	.0889	.65660
Flexibility	-.0157	.61432
Communication Skill	.0000	.65668
Skill of Information Use	.0593	.61449
Skill of Technology Use	.0632	.61382

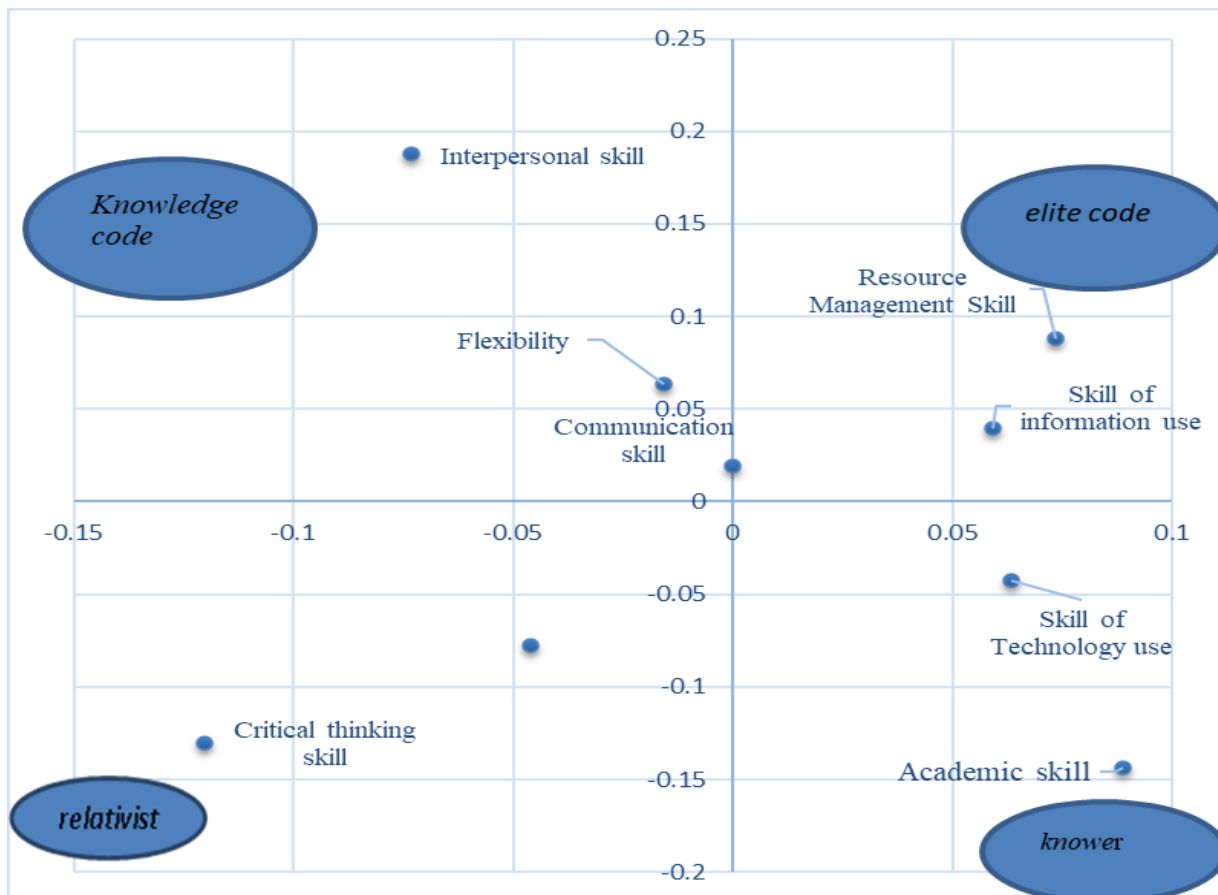
The means calculated in Table 4 are used to plot the x-axis on the Cartesian plane to form the legitimation codes. The mean plot on the x-axis for critical thinking was ($x= - 0.12$), for problem-solving skills ($x= -0.05$), for resource management ($x=0.07$), for interpersonal skills ($x= -0.07$), for academic skills ($x=-0.09$), for flexibility ($x= -0.02$), for communication skills ($x= .00$), for the skill of information use ($x= 0.06$), and for the skill of technology use ($x=0.06$).

The x and y values calculated in Table 2 and Table 4 were used to plot legitimation codes on a Cartesian plane that produces a specialization plane of Legitimation codes. This is done along the four codes: knowledge codes, elite codes, knower codes, and relativist codes. As discussed in

the “Conceptual Framework” section, the knowledge code (ER+/SR-) emphasizes possession of specialized knowledge, and the attributes of actors are downplayed, knower code (ER-/SR+) emphasizes the attribute of actors by downplaying specialized knowledge, the elite code (ER+/SR+) is based on possessing both specialist knowledge and being the right kind of knower, and relativist code (ER-/SR-) is determined by neither specialist knowledge nor attributes actors involved in practices. Maton (2016a) asserts that specialization code conceptualizes “rules of the game” embodied in employability skill acquisition, practice, disposition, and contexts. So what matters in the acquisition of employability skills from the four codes listed above could be the learning knowledge, concepts, theories, skills, and procedures in different courses (knowledge code), the attributes, talents, and personal experiences of students (knower code), both (élite code), or neither the knowledge nor the attributes or talents of students (relativist code). The following figure shows the legitimation code of the students.

Figure 2

Specialization Plane showing Legitimation Code of Students on Employability Skills



The finding of the study shows that students have knowledge code (ER+/SR-) on interpersonal skills and flexibility skills. Having a knowledge code on flexibility and interpersonal skill shows that students are downplaying *social relation* by considering the talent and the disposition that students have toward flexibility and interpersonal skills as unnecessary for the

acquisition of the skills. Students have *elite code* (ER+/SR+) for resource management skills and skill of information use. This shows that both skills and knowledge learned in different courses as well as students' talents are considered important in the acquisition of resource management skills and skills of information use. Students have a *knower code* (ER-/SR+) for the skill of technology use and academic skill. This means the talent that students have about the skill of technology use and academic skills is considered an important basis of achievement, whereas, the skill and knowledge learned in different courses are downplayed for the acquisition of employability skills. Students have a relativist code (ER-/SR-) for critical thinking and problem-solving skill, showing that students have an attitude of “anything goes” with the acquisition of critical thinking and problem-solving skills. They did not emphasize either the talent of students or the knowledge and skills learned in different courses as the basis of achievement for employability skills acquisition. Communication skills lay in between knower code and elite code.

Regression Analysis of Legitimation Code Theory

The other purpose of this study was to examine the prediction of students' legitimate code on their employability skills. Linear regression analysis was done to see the extent of prediction of the independent variable (legitimation code of students) over the dependent variable (perceived employability skills of students).

Table 5

Regression Statistics of Overall Legitimation Codes on Perceived Employability Skills of Students

Variable	Unstandardized Coefficients B	R ²	Coefficients	t-statistic	P- value
Overall Legitimation Code	1.572(Constant) .554	.102	.323	6.719	.000

Overall legitimation skill of students significantly predicted their perceived competence of employability skills $b = 1.572$, $t(388) = 6.04$, $p < .05$. Overall legitimation code of students explains 10.2% of the variation in perceived competence of employability skills of students $R^2 = .102$, $F(1, 388) = 45.14$, $p < .05$. The overall legitimation code is statistically significant in explaining the employability skills of students at $p < 0.05$. The following is the model for understanding the employability skills of students. Employability skills of students = $1.572 + 0.554$ (overall legitimation code). As the mean of the overall legitimation code increases by 1, the overall employability skills of students increase by 0.554. The more students have elite code the better their employability skills.

Discussion

The purpose of this study was to understand the underlying principles behind employability skills acquisition. We examined the legitimation codes of graduating students on different sets of employability skills by analyzing the social relation and epistemic relation they have using the

specialization dimension of Legitimation Code Theory. The study provides primary evidence on the underlying organizing principles (Legitimation Codes) behind the practice of employability skills acquisition.

Students' epistemic belief about employability skills, when conceptualized from the perspective of the specialization dimension of LCT, could be their belief whether: employability skills are related to personal talents and experiences of students and best developed by students themselves (knower code), or their epistemic belief that employability skills should be taught through the concepts and theories in the curriculum (knowledge code), or both a belief that employability skills are personal talents and experiences, and at the same time should be developed through the concepts and theories in the curriculum (élite code), or neither of these beliefs (relativist code). The findings of the study showed that students do not expect that developing their employability skills is the responsibility of the classroom teaching-learning process except for some skills such as interpersonal skills and personal qualities such as flexibility. This finding is surprising because those seemingly requiring personal talents and experiences, such as interpersonal skills and flexibility, were found to have a knowledge code (ER+/SR-) that legitimizes the importance of developing the skills through learning contents, theories, skills, and procedures in different courses. Whereas, the academic skill was found to have a knower code (ER-/SR+), which legitimizes the importance of personal talent and experience in employability skills acquisition.

Based on literature reviews, one may hypothesize that university instructors and students should have a knowledge code on different employability skills by taking into consideration the importance of learning concepts, theories, skills, and procedures in courses as important for the development of employability skills. In line with this, some researchers explicitly emphasize a knowledge code. For example, Suleman (2016) stated that higher education is demanded to prepare graduates for the world of work, and universities are expected to meet standards on employability. Wiley (2014) states that employability is an ongoing and contemporary worry for Higher Education Institutions. Embedding employability into the heart of higher education will continue to be a key precedence of governments, universities, colleges, and employers; the consequence of which will bring both significant national benefits, signifying higher education's broader role in contributing to economic growth as well as its vital role in social and cultural development (HEFCE, cited in Pegg et al., 2012). Knight and Yorke (2003) argue entrenching employability skills in the undergraduate curriculum is an acknowledgment that universities and the needs of employers are compatible. They illustrated that different studies have shown degree programs afford the development of employability skills. The literatures imply that employability skills should have a knowledge code. They emphasize the importance of learning concepts, theories, skills, and procedures in courses as the basis of achievement for employability skills acquisition.

Unsurprisingly then, there seems to exist a code clash between what the literature says about the expectation of the development of employability skills and the legitimation code of university students. What the literature expects to be the practice of employability skills acquisition and what university students see as the legitimate basis of achievement match some skills such as interpersonal skills and flexibility skills, and clashes with others such as critical thinking skills,

information use, and technology use. The reasons for the mixed result of policies and strategies about the development of employability skills could be related to the fact that the policies are put forward without seeing the underlying mechanisms of practices of employability skills acquisition.

This study embodies a unique and important contribution to the literature about employability skills acquisition. It was the first to use Legitimation Code Theory to predict employability skills acquisition. According to Maton (2016a), Legitimation Code Theory (LCT) provides a collection of concepts that are used in empirical research to explain problems. LCT assumes that actors affirm legitimacy for what they are doing or for the organizing principles embodied by their actions. Practices are underpinned by implicit organizing principles which give legitimacy to actors and their claims to what counts as realizations of valid knowledge. The study could enhance existing knowledge and practice about employability skills acquisition.

The study extends the research findings on employability skills by combining employability skills research with Legitimation Code Theory. The study highlights the importance of using other dimensions of legitimation code theory for a comprehensive understanding of the practice of employability skills acquisition in higher education institutions. The results of the study can have implications for potential studies in other countries to identify the kinds of *specialization codes* exist in other parts of the world regarding employability skills acquisition. Researchers are encouraged to identify specialization codes that exist in other universities to know whether the same or different specialization codes exist for employability skills acquisition. Such knowledge helps to understand whether the specialization codes concerning employability skills are universal or locally contexted. In addition to this, we recommend that other researchers locally or abroad use other dimensions of Legitimation Code Theory (such as semantic code) to understand the dynamics of employability skills acquisition so that we have a more complete understanding of the whole practice of employability skills acquisition.

Moreover, the simple linear regression output has shown the possibility of predicting the employability skills of students from their legitimation code. The more students have elite code, the better their overall employability skills in the context of the three public universities in this study. That could be because when students have a higher epistemic relation and a social relation about employability skills, they are more likely to benefit from both classroom practices and their personal experiences. The finding validates legitimation code theory in that practices can be explained by organizing principles such as legitimation codes.

The findings of this study also contribute to the Legitimation Code Theory, which is a developing framework. Our study has proven that it is possible to predict achievement or perception of competence of students' employability skills using legitimation codes. In this research, it happened to be possible to predict the employability skills of students using their legitimation codes.

Conclusions and Recommendations

This study will contribute to the literature about employability skills since there are few studies done on employability skills using the Legitimation Code Theory. It can be concluded from

the findings of the study that the more students have an elite code, which is the more epistemic relation and social relation towards employability skills, the better their perceived competence in employability skills. Ten percent of the employability skills of students can be explained by specialization codes of students. All four specialization codes are apparent in the acquisition of employability practice. Further research is required to better understand the underlying practices of employability skills acquisition using other dimensions of Legitimation Code Theory.

This study recommends that Ministry of Education should take national assessment to identify the legitimation codes with regard to employability skills before suggesting strategies for the development of these skills in higher education institutions. Policies about development of employability skills should be suggested by seeing what is behind the practice of employability skills. Students should be encouraged to get involved in extracurricular activities early on; the career centers should provide support not only for graduating students but also for incoming students beginning from first year so that students can develop an elite code.

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