

# **Key Factors in the Employability of Education Graduates in an Open and Distance Institution**

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## **Abstract**

Beyond producing academically qualified graduates, higher education serves a broader purpose of producing well-rounded citizens and graduates. Meeting the demands of the labour market and contribution towards the socio-economic development of a country (Unisa, 2010; Chetty, 2012; Sawahel, 2014; Department of Education, 1995). As a comprehensive and mega open and distance learning institution in Africa, the University of South Africa (Unisa) enrolls more than 350 000 students per year and in 2017 contributed more than 45 000 graduates. Nationally, Unisa delivers some 40% of all Education graduates, by far the most substantial contribution in the country. This paper is to presents the results of the Employer Survey conducted in 2017/18 among the employers of Unisa graduates from the College of Education. The survey examined the perceptions of employers about the skills and competence of Unisa Education graduates. This included basic skills and understanding; knowledge and intellectual ability; workplace skills and applied knowledge; and interactive and interpersonal skills. The conceptualisation of the study is based on Unisia's Student Success and Support Framework, which argues that increased knowledge and consideration of students' life circumstances are essential to inform efforts towards student success and satisfaction. The survey, therefore, included academic and non-academic variables, agency and fit within the broader student success and learner support framework. A census approach was employed, including all school authorities in both public and independent schools through an online survey instrument. In this study, employer refers to authorities governing at the school level, including school principals, deputy principals, curriculum specialists and heads of phases in rural, semi-rural and urban schools in South Africa. The analysis included descriptive statistics and thematic analysis of open-ended questions. The study illustrates the dichotomous relationship between hard skills and soft skills, the ranking of Unisa, and the implications of distance education on education graduates.

## **1 Introduction**

Beyond producing academically qualified graduates, higher education serves a broader purpose of producing well-rounded citizens and graduates. Meeting the demands of the labour market and contribution towards the socio-economic development of a country (Unisa, 2010; Chetty, 2012; Sawahel, 2014; Department of Education, 1995). As a comprehensive and mega open and distance learning institution in Africa, the University of South Africa (Unisa) enrolls more than 350 000 students per year and in 2017 contributed more than 45 000 graduates. Nationally, Unisa delivers some 40% of all Education graduates, by far the most substantial contribution in the country.

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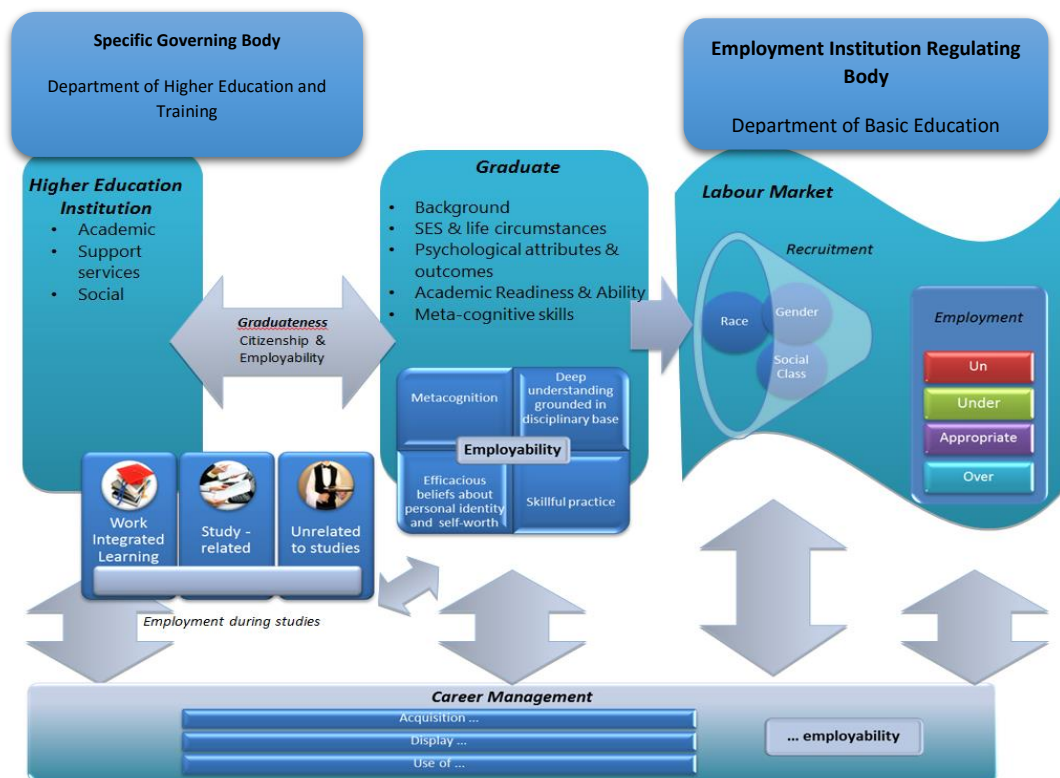
The study illustrates the value of employer surveys for guiding curriculum design and institutional support. Such studies are challenging as centralised databases of employers often do not exist. Education is an area where employer surveys can be more easily administered as countries have central repositories. This may be similar for other fields which fall under professional bodies.

## **2 Theoretical Framework and conceptualisation**

The Student Success and Support Frameworks at Unisa emphasise that increased knowledge of student experiences and life circumstances is essential to inform Unisa's efforts to increase student success and satisfaction (Subotzky & Prinsloo, 2011). Employability is an indicator of student success as well as Unisa's ability to provide qualifications appropriate for the ever-changing demands of the globalised knowledge economy. The Employer survey, with its focus on academic and non-academic variables, agency and fit, is located within the broader student success and learner support framework. This employer survey focuses on the gap between what graduates possess (knowledge, skills and attributes) and expectations of the workplace (Tynjälä, Välimaa, & Boulton-Lewis, 2006).

Over the years, the literature on the understanding of employability has matured. Initially, the focus was on preparing graduates for employment. However, this focus has since shifted to a more holistic view of employability as a part of gradueness (Knight & Yorke, 2004). This shift mirrors the changes in the labour market where students are no longer employed in one job for life, but are expected to be adaptable in order to deal with the ever-changing modern work-environment and its requirements, including emerging technologies (Commission for Employment and Skills, 2014; Institute for the Future, 2011; Bridgstock, 2009; Glover, Sue Law, Youngman, & Routledge, 2002; UK). Initially, employability research focused on skills and dispositions, which would increase the chances of employment of graduates (Fallows & Steven, 2000). However, more holistic views emerged considering the subjective dimensions such as personal disposition, attitudes and identity (Bisset et al., 2014; Tomlinson, 2007). The shift in the literature indicates that academic proficiency has become only the first tick mark in the recruitment process (Bridgstock, 2009; Tomlinson, 2007; Yorke, 2011).

The emphasis has moved beyond the prerequisite of appropriate qualifications (which are seen as a given) to finding graduates who can immediately adapt to the workplace and start being productive (Bridgstock, 2009; Tomlinson, 2007). This is mainly due to the rapidly changing information and communications technologies (ICTs) landscape, increasing diversity, the advent of big data and the globally connected world (Institute for the Future, 2011; UK Commission for Employment and Skills, 2014). These dynamic demands of the workplace are accommodated in the study by first focussing on the competences and roles of educators as published in the Revised Policy on the Minimum Requirements of Teacher Education Qualification (Department of Higher Education and Training, 2015) and secondly on the more generic and transferable skills required for the current and future workplace. These skills include basic skills and understanding; knowledge and intellectual ability; workplace skills and applied knowledge; interactive and personal skills. The Department of Higher Education and Training (DHET) has a direct impact on Teacher Education in South Africa and therefore Higher Education institutions training education students. The Department of Basic Education (DBE) has a vested interest in the management of schools who employ these teachers. The DHET and DBE thus represent two additional parties with vested interests in teacher education and employment.



**Figure 1 Conceptual Framework for Graduate Employability in Education (adapted from Archer & Chetty, 2013, p. 138)**

### 3 Methods and Sources of Data

Data were collected employing a structured online survey instrument with some open-ended questions. Before the administration of the survey, formal ethical clearance and research permission were obtained from the Unisa Professional Research Committee and the Research Permission sub-committee as well as the national and provincial DBE in South Africa.

The survey was circulated to all the authorities of the Basic Education schools, both public and independent in South Africa. The survey was completed anonymously. It was made clear to all participants that there will be no adverse consequences to non-participation. Each survey was introduced with the study information, and its objectives and respondents were given the option to either continue to complete the survey, thereby indicating consent, or exit the survey.

#### 3.1 Sample and Sampling method

Using a census approach, the study attempted to access the entire population of Basic Education authorities in schools across all the provinces in South Africa. The DBE’s public, published Education Management Information System (EMIS) of Quarter 2, 2016, was employed as the population. The EMIS data is captured, and data quality procedures are administered by the Department of Basic Education and then published. By the DBE’s admission, the data was problematic, and it contained incomplete information as well as inaccurate contact details. This was, however, the only official, published database from the DBE. Participation was both anonymous and voluntary, so those who completed the survey constituted the data.

As can be seen from the Table 1 below, the three Provinces which had the most inadequate contact information were Limpopo (49%), KwaZulu Natal (45%) and Mpumalanga (12%) and this should be kept in mind when consulting the results. The Overall Data Quality Index of 76,5% was deemed acceptable. The data quality of provinces was directly related to the level of development of the provinces.

**Table 1: Contact Details available**

Row Labels	Schools	e-mail	No e-mail	Data Quality Index
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<b>Eastern Cape</b>	5635	5632	3	99.9%
<b>Free State</b>	1224	1218	6	99.5%
<b>Western Cape</b>	1701	1687	14	99.2%
<b>Gauteng</b>	2807	2775	32	98.9%
<b>North West</b>	1523	1480	43	97.2%
<b>Northern Cape</b>	571	502	69	87.9%
<b>Limpopo</b>	3995	1958	2037	49.0%
<b>KwaZulu Natal</b>	6079	2721	3358	44.8%
<b>Mapumalanga</b>	1834	227	1607	12.4%
<b>Total</b>	<b>25369</b>	<b>18200</b>	<b>7169</b>	<b>76.5%</b>

Out of 25 369 schools recorded in EMIS, the accessible population for the study was thus 18 200 schools. There were 16 550 (90,9%) Public Schools and 1 650 (9,1%) Independent Schools, comprised of Primary Schools, Intermediate Schools, Secondary Schools and Combined Schools. This is in line with the representation of Public and Independent school in the country.

### 3.2 Data Analysis and Survey response rate

Data collected using Qualtrics was analysed using SPSS version 22. The analysis included descriptive statistics as well as thematic analysis of open-ended responses.

The online survey targeted 18 200 accessible populations in Basic Education schools which had email addresses in all province across the country. The total number of accessed surveys was 588; some of the surveys were accessed by participants, not in a management position or having been in the position for too short a time and were therefore excluded from the study. Of these 475 respondents qualified to complete the survey of which there were 339 partial and 207 complete responses. For a 0.50 probability and a 95% confidence interval with an accessible population of 18 200, the sampling error was 5.27% (for n=339).

## 4 Study Limitations

There were some limitations to the study.

- Although the study had a fair representation, socioeconomic and infrastructural challenges. Quintile<sup>1</sup> one and two schools in rural and semi-rural areas were more difficult to reach as internet connectivity is limited.
- Provinces which had the lowest data quality index were Limpopo (49%), KwaZulu Natal (45%) and Mpumalanga (12%) affected representation of three these provinces.

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<sup>1</sup> South African public education is funded by government through a pro-poor funding model known as the quintile system. Schools are ranked in terms of their resources, with quintile 1 schools being the 20% most poor and quintile 5 the most affluent. Lower quintiles (1 to 3) are declared no-fee schools, receiving the majority of the government's funding, while quintiles 4 and 5 receive only a comparatively small amount of funding (Dass & Rinquest, 2017).

## 5 Profile of the Schools and Respondents

The profile of the respondents included aspects such as the representation of schools in districts, school types and classifications, respondents' position held and the number of years in that position.

### Respondents' Profile

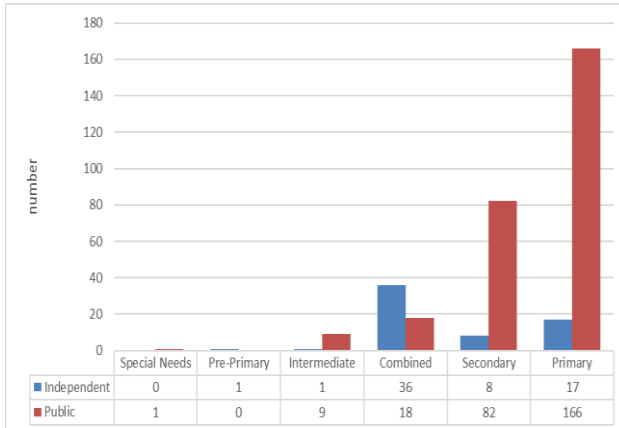


Figure 2: School type (n=339)

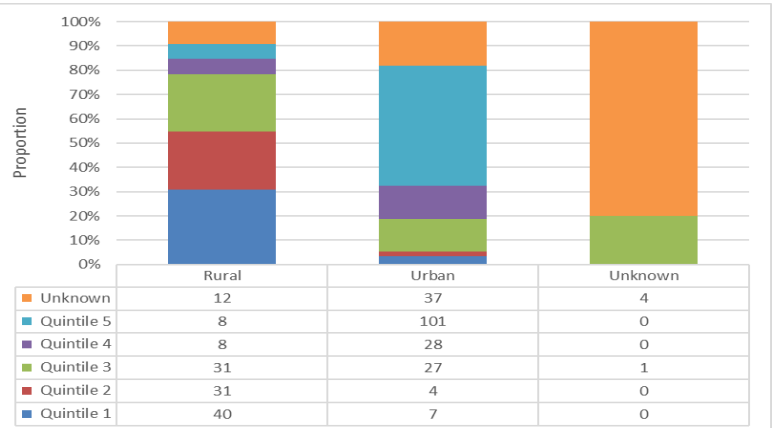


Figure 3: School classification (n=339)

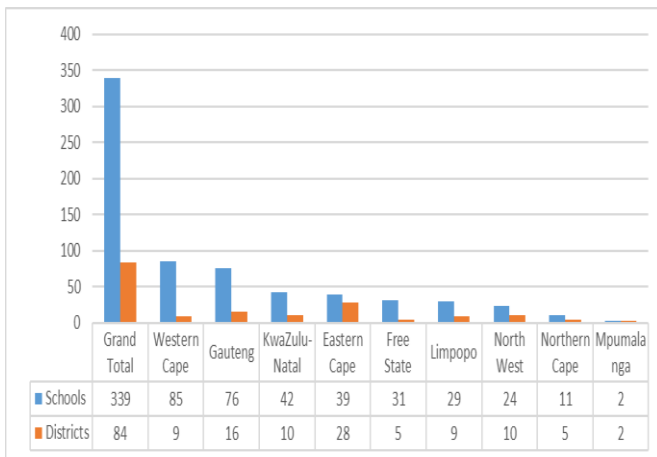


Figure 4: Representation of Schools and Districts (n=339 schools; 84 districts)

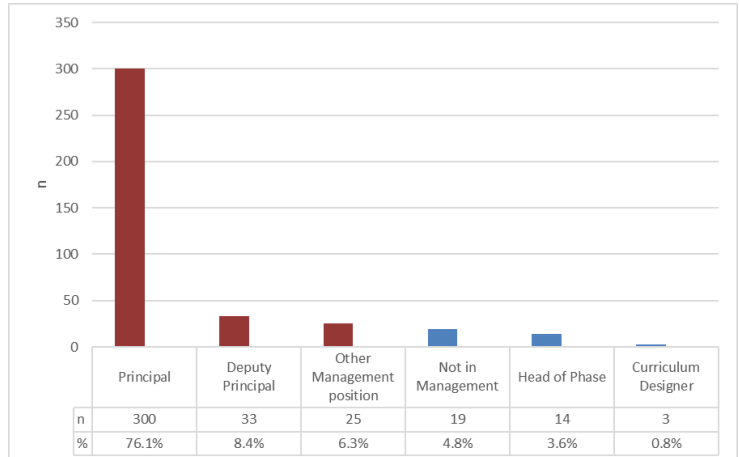


Figure 5: Respondent position held at school (n=394)

Table 2: Respondents' Number of years with the School (n=394)

	n	%
Less than 3 years	28	7,1%
3 years or more	366	92,9%
Total	394	100%

As seen in Figure 2, the majority of the respondents were from primary public schools (166) followed by secondary public schools (82). Interestingly, in combined schools, the independent schools (36) outnumber public schools (18). As expected, in Figure 3, respondents from urban areas are mostly from Quintile 5 schools (101), and conversely, respondents from rural schools mainly were from Quintile 1 schools (40). Most of the responses in Figure 4 came from more urbanised provinces like the Western Cape (85) and Gauteng (76) as opposed to more rural provinces like the Northern Cape (11) and Mpumalanga (2). The majority of the respondents were school

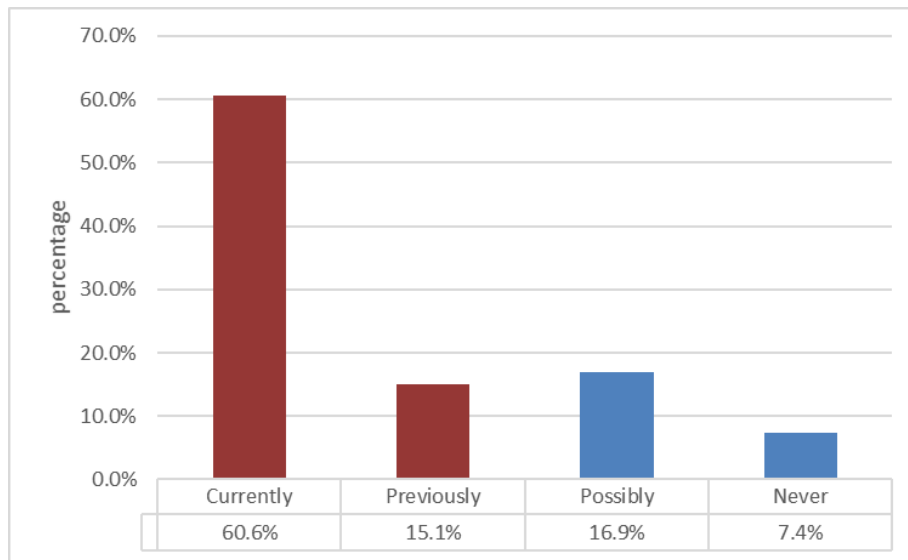
principals/headmasters (300), followed by Deputy principals (33) (see Figure 5). Table 2 shows that 92.9% of the respondents were at their particular schools for more than three years.

## 6 Survey Findings

The analysis included expectations of employee attributes in general and the attributes and reasons for and rating of Unisa Graduates in particular.

### 6.1 Rating of Unisa Graduates

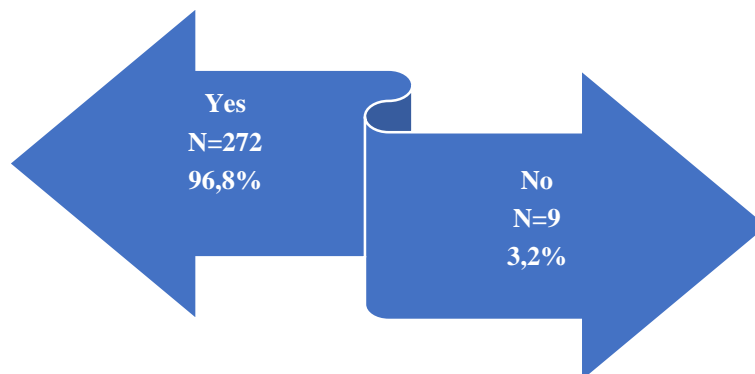
Figure 6 refers to the employability skills of Unisa graduates as viewed by employers. In some instances, for benchmarking purposes, the graduates were compared to those from other South African institutions.



**Figure 4: History of Employment of Unisa Graduates (n=325)**

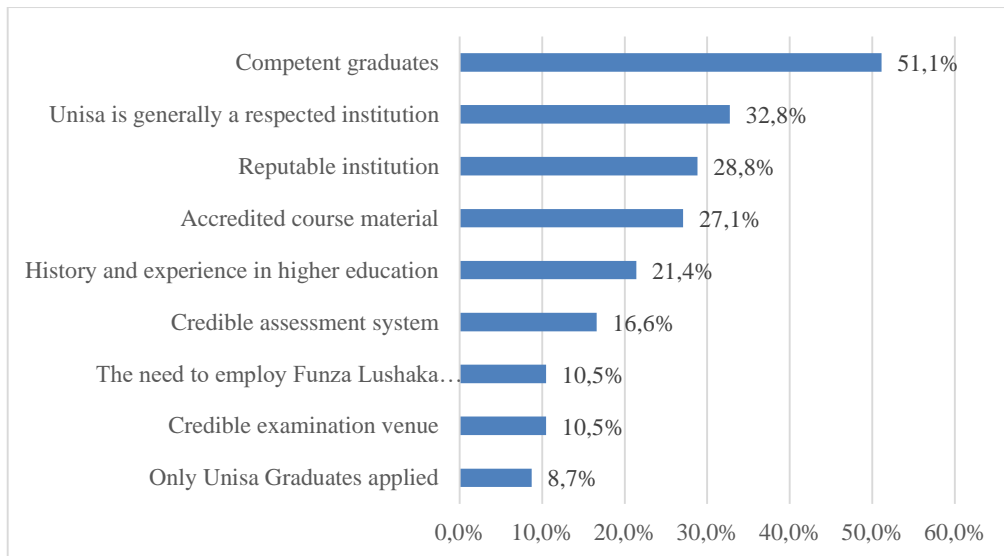
Of the 325 responses from employers to this question:

- The majority of respondents (60,6%) indicated that they currently employ Unisa graduates, while some 17% indicated they would possibly employ Unisa graduates in future, with some 15% showing they had previously employed Unisa graduates. in their employ, followed by 16, 9% who said they would possibly have a Unisa graduate in the future.
- Only 7,4% indicated that they have never had a Unisa graduate in their employ.



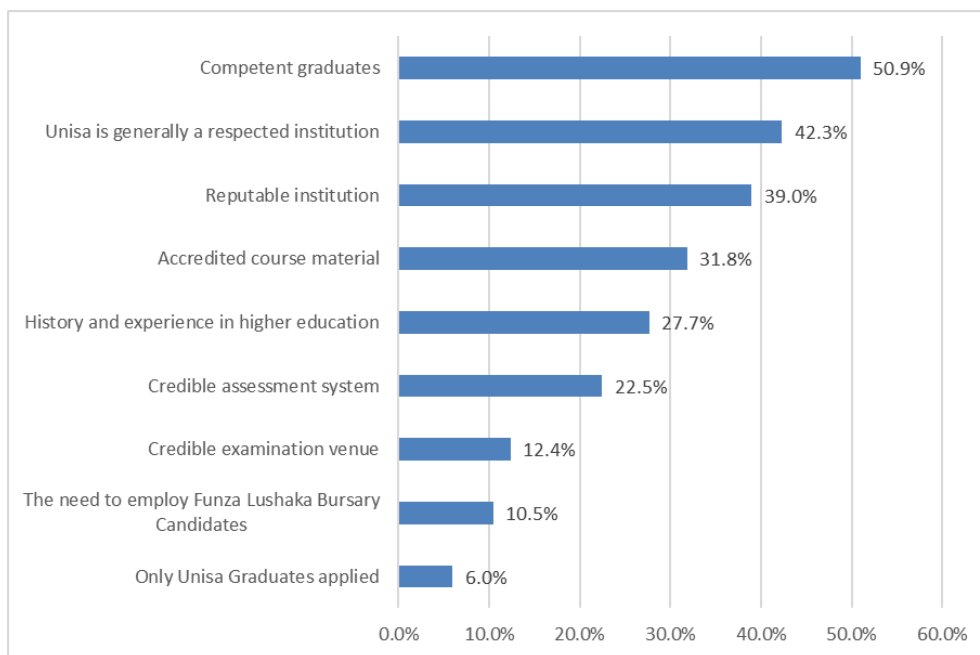
**Figure 5: Would you Consider a Unisa Graduate (n=281)**

Nearly 97% of respondents indicated they would consider employing Unisa graduates in future.



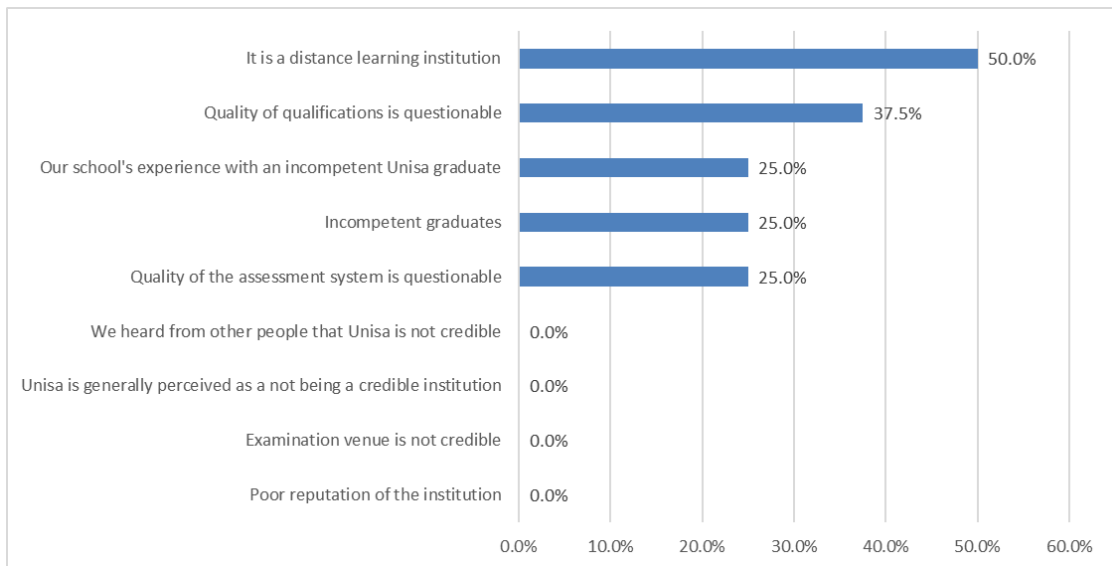
**Figure 6: Reasons for employing Unisa Graduates (n=66, multiple response set)**

The reasons supplied for employing Unisa graduates (Figure 6) indicated that graduates were viewed as competent (51,1%). Other top reasons revolved around institutional factors such as Unisa’s respectability (32,8%), reputation (28%) and accredited course material (27%).



**Figure 7: Reasons you previous and possibly future employment of Unisa Graduates (n=649, multiple response)**

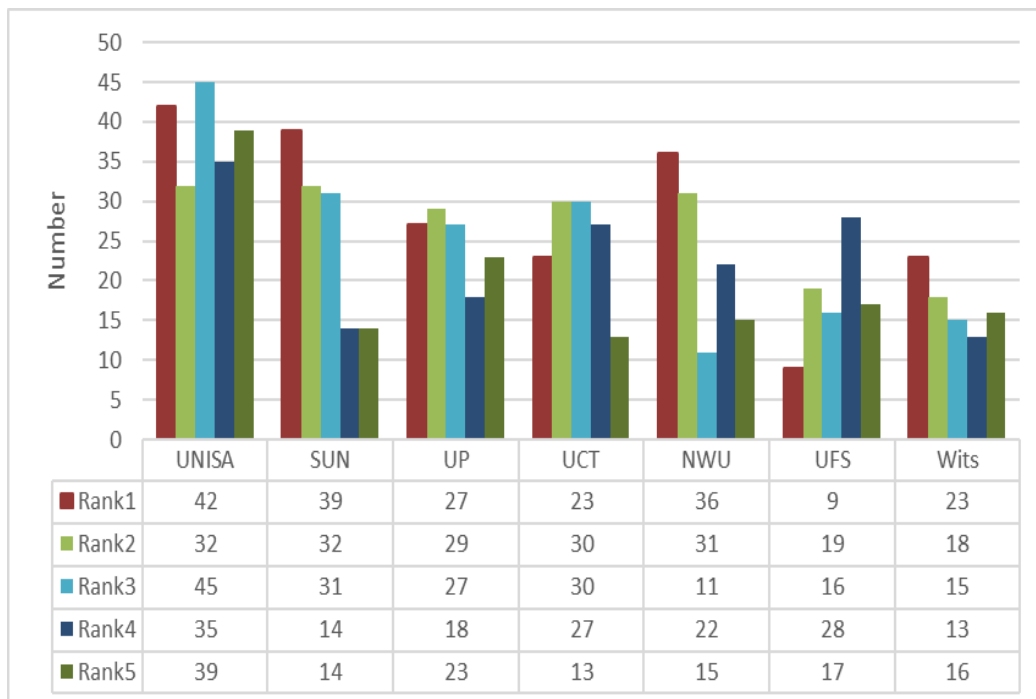
Figure 9 shows the reasons for previous and possibly future employment of Unisa Graduates. The primary reason was the view that these graduates were competent. (50,9%). Followed by Institutional (42,3%), reputation (39%), history and experience (27,7%). Main curriculum matters included course material (31,8%), assessment (22,5%) and examination venues (12,4%).



**Figure 8: Reasons you would not consider Unisa Graduate (n=13, multiple-responses)**

As previously indicated, Figure 10 shows only some 3% of respondents would not consider employing Unisa graduates in the future. The primary concern raised was the nature of distance education itself (50%). It is essential to consider this in the brand reputation and advertising of the benefits of distance education to school management, the provincial education department and DHET managers.

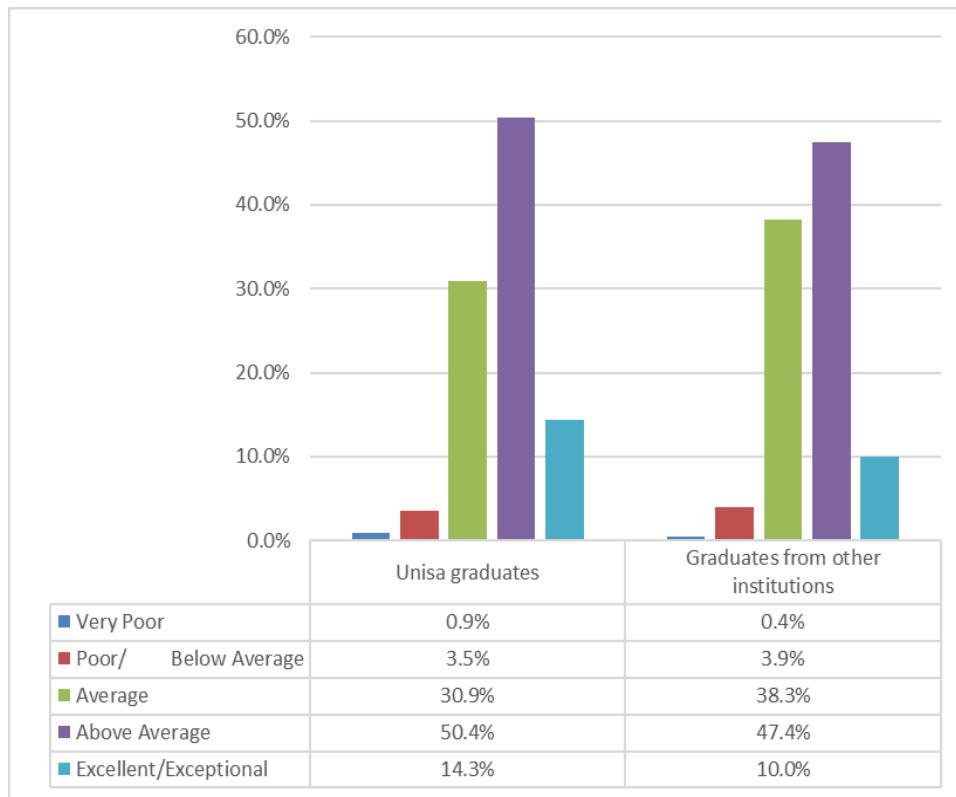
The overall perception of Unisa Education Graduates was assessed in two different manners. Firstly, the respondents were asked to rank all the Public Higher Education Institutions in South Africa regarding their preference for Education Graduates (see Figure 11). Secondly, the respondents were requested to rate the quality of Unisa Education Graduates compared to those from other institutions. In both cases, Unisa was evaluated as delivering the best graduates.



**Figure 9: Most Frequent Top 5 ranking**



In Figure 11, Unisa was ranked in the Top 5 preferred institutions for Education Graduates in South Africa. It was also most frequently indicated as the first choice for Education Graduates, followed by the Universities of Stellenbosch (SUN) and Cape Town (UCT).

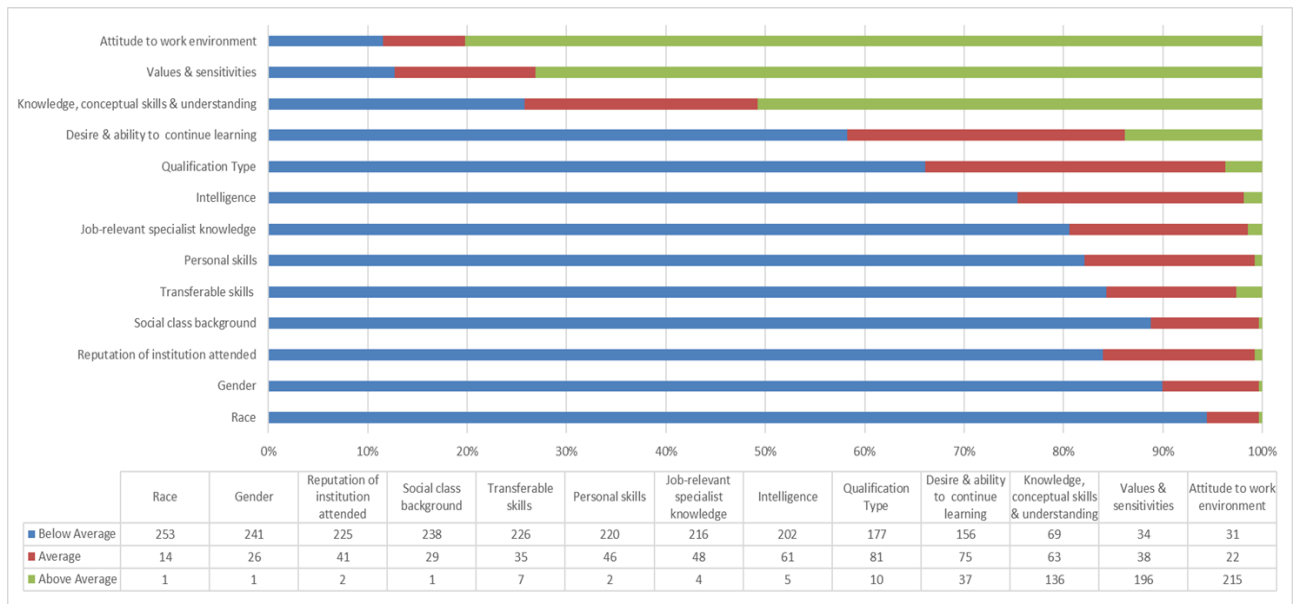


**Figure 10: Overall Unisa Graduate Rating (n=230)**

Regarding overall graduate rating in Figure 12, almost 65% of respondents rated Unisa graduates as above average, compared to around 57% for other institutions. This data does seem to show some bias towards positively assessing graduates, but even with this in mind, Unisa graduates are rated more highly than other graduates.

## 6.2 Attributes and skills valued by employers in Education Graduates

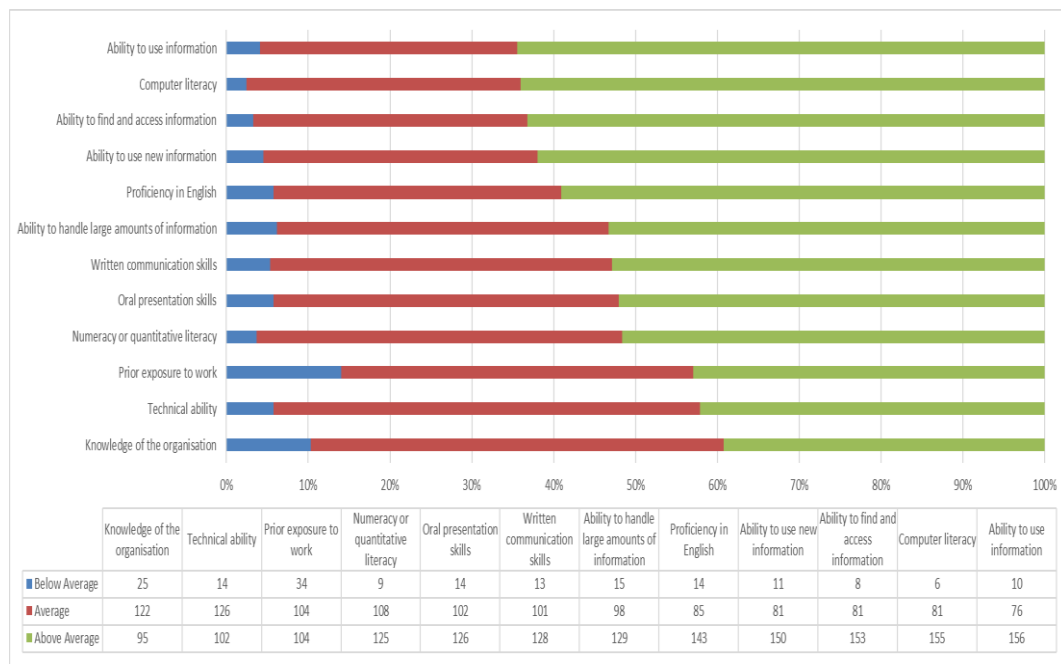
The survey further interrogated attributes that employers are looking for and these ranged from hard skills such as technical, qualifications, specialist knowledge, conceptualisation and understanding to soft/transferrable skills such as attitude to work environment, social background and interaction, gender and race issues.



**Figure 11: Importance of Attributes in prospective employees (n=268)**

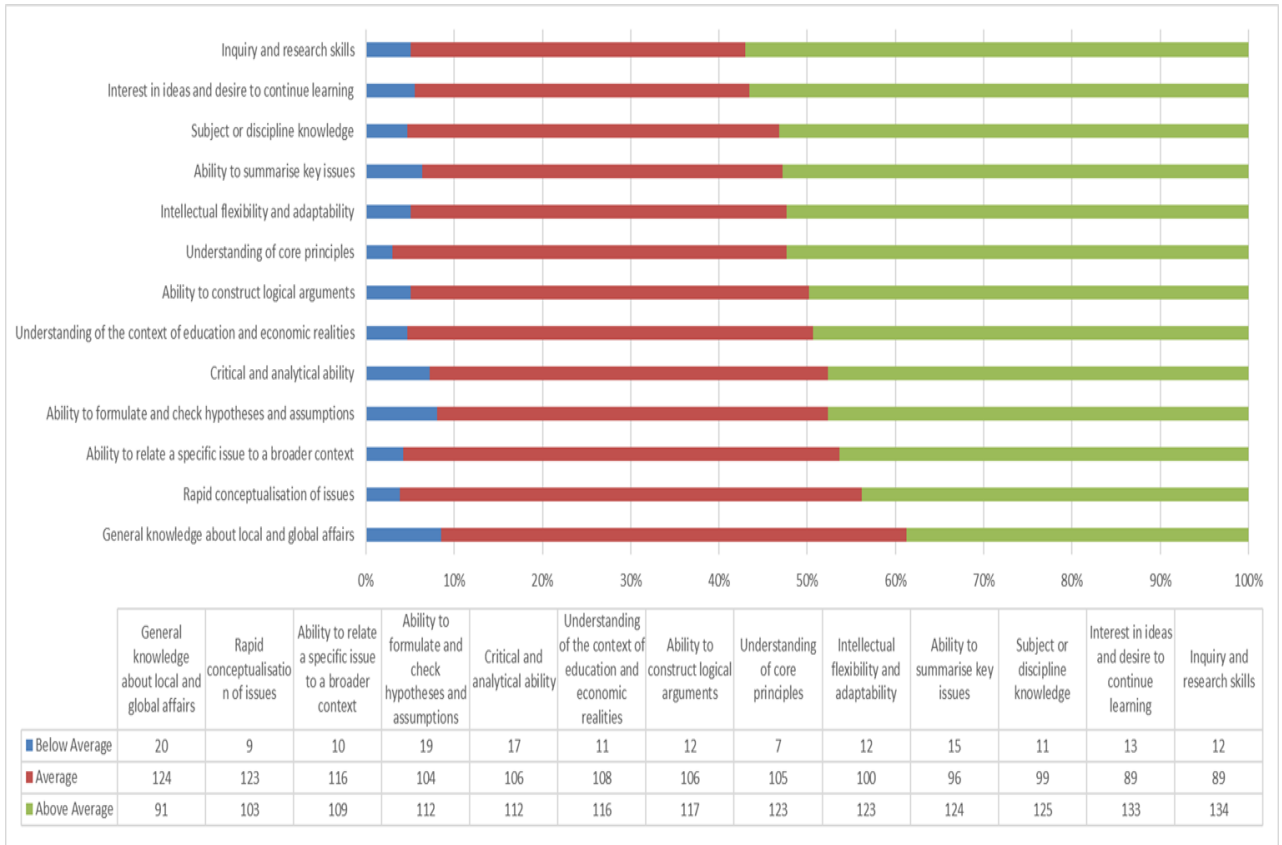
Figure 13 shows the importance attributed to attitudes and values and how far they outweighed the importance attributed to immalleable aspects, such as race, gender and social background. This outcome indicates that educational institutions must also focus on habits, attitudes and behaviours when preparing graduates.

In Figure 14 below, the various attributes are examined in more depth in line with the DBE requirements for educators in South Africa.



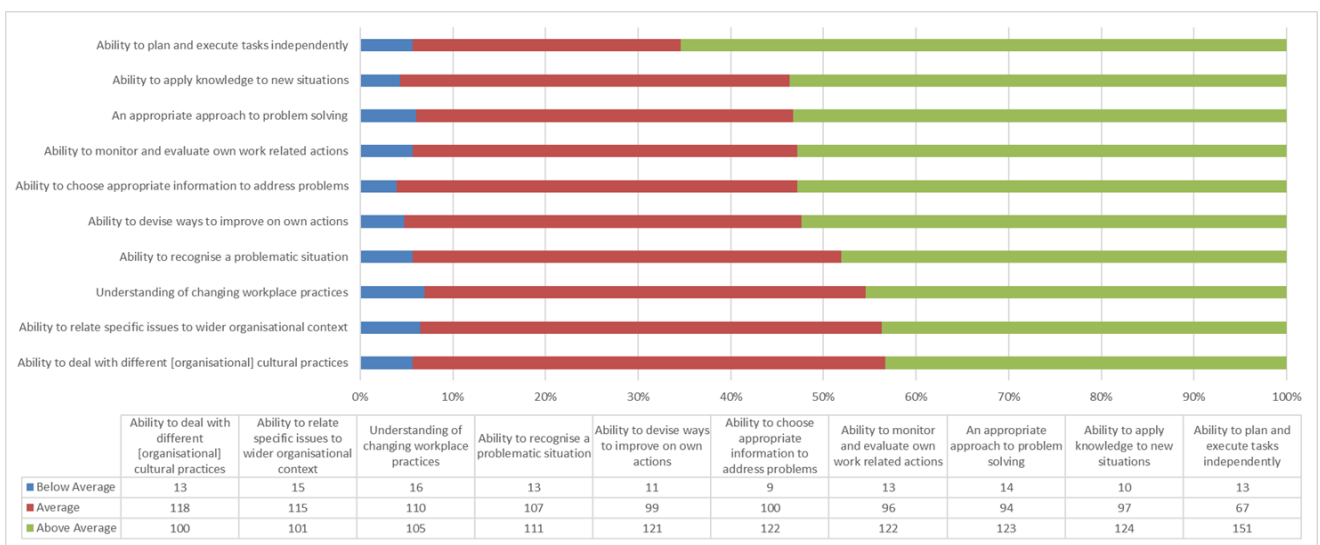
**Figure 12: Importance of Basic Skills and Understanding (n=242)**

Basic Skills and Understanding are the most valued skills around information, including the ability to use information; computer literacy; ability to access information and handling of substantial information. The next most valued group of Basic Skills relate to communication skills.



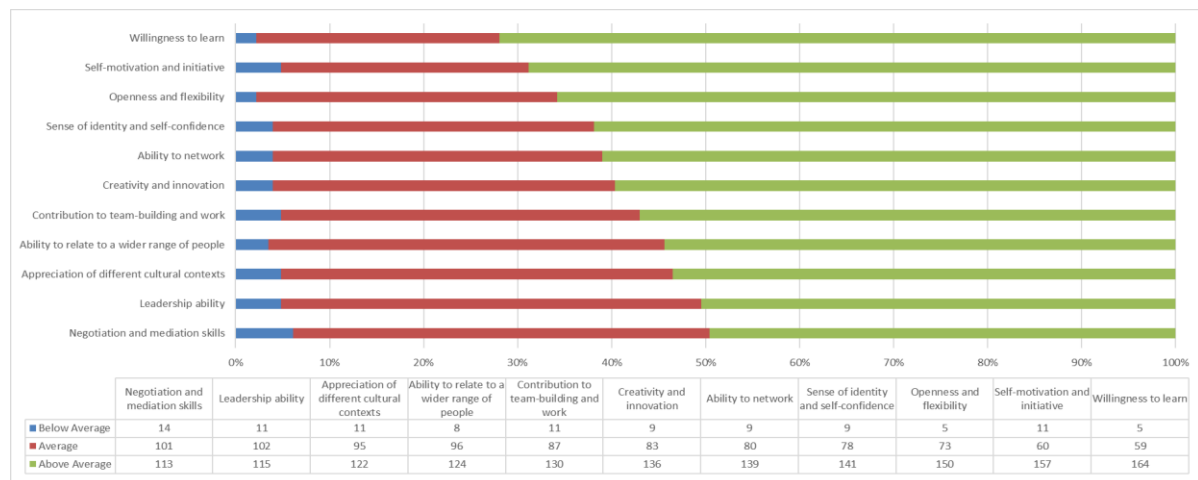
**Figure 13: Importance of Knowledge and Intellectual Ability (n=242)**

In Figure 15, the importance of information skills is reiterated in the rating of knowledge and intellectual abilities. The most valued skills included inquiry and research skills; interest in ideas and desire to continue learning; ability to summarise key issues and intellectual flexibility and adaptability. This seems to be in-line with the idea of a rapidly changing working environment requiring graduates who are dynamic and responsive. Surprisingly the importance attached to contextualisation skills such as the ability to relate a specific issue to a broader context and general knowledge about the local and global affairs were deemed as some of the least important of knowledge and intellectual abilities.



**Figure 16: Workplace Skills and Applied Knowledge (n=231)**

The ideas of the 21-century employee are captured in the importance attached to workplace skills and applied knowledge. Independence, application of knowledge and appropriate problem-solving are emphasised. Specific organisational knowledge and culture are less stressed. Schools seem to value independence and self-directedness.



**Figure 17: Importance of Interactive and Personal Skills (n=228)**

Interactive and interpersonal skills again emphasise self-management and self-directedness. Willingness to learn; self-motivation and initiative; openness and flexibility and innovation enjoyed a high-level of importance. Skills related to team-work, networking and dealing with other staff are more highly sought after than leadership; negotiation and mediation skills.

## 7 Conclusion

The census survey aimed at examining school views of Unisa Education Graduates, from the perspective of employers. While the study was not without challenges, a fair representation of responses was obtained. The EMIS data employed for sampling provided a challenge, with only around 77% of schools being associated with any e-mail address (this does not refer to accuracy, only presence of). Unfortunately, poor representation was achieved from Mpumalanga and Limpopo specifically. Other than that, the respondents were appropriately qualified to respond, both regarding their management status and experience. Only 7,4% of respondents indicated that they had never employed a Unisa Graduate. All provinces were represented as well as a fair distribution among all the provincial districts. Both the rural vs urban and poverty-based quintile indices were well represented.

Key Finding of Employer perceptions of Unisa graduates from the College of Education entailed:

- Unisa was ranked as the institution of choice for Education Graduates in South Africa, followed by the Universities of Stellenbosch and Cape Town. Education graduates were rated above average compared to other institutions in the country.
- Reasons for considering future employment first noted the competence of the graduates, then the reputability of the institution, followed by the quality of the curriculum. Some future consideration pertained mainly to concerns about the distance nature of education itself.
- Attributes that schools value most in prospective employee were positive attitudes and values, which far outweighed the importance attributed to unmalleable aspects, such as race, gender and social calls background. This means educational institutions must also focus on habits, attitudes and behaviours when preparing graduates. At Unisa, the Shadowmatch@ project may contribute significantly to this endeavour.
- The most valued basic skills and understanding referred to the ability to use the information; computer literacy; ability to find and access information; ability to use information and ability to handle large amounts of information. Information skills were further emphasised under intellectual skills and abilities: inquiry and research skills; interest in ideas and desire to continue learning; ability to summarise key issues and intellectual flexibility and adaptability. Unisa and the College of Education are already providing additional support in the form of 34 teacher ICT centres recently launched around the country.

Regarding workplace skills and applied knowledge: independence, application of knowledge and appropriate problem-solving is emphasised. Self-management and self-directedness are stressed in the interactive and interpersonal skills. Willingness to learn; self-motivation and initiative; openness and flexibility and innovation enjoy a high-level of importance. It seems skills related to team-work, networking and dealing with other staff are more highly sought after than leadership; negotiation and mediation skills. Values, ethics and professionalism, along with sound subject knowledge, are the most valued basic competences. The collective roles of being a subject specialist; learning mediator and lifelong learner are most valued.

Recommendations include:

- Improved supervision and mentorship around teaching practicals, as well as extended and diverse exposure to the work environment. Unisa students working during studies was noted as beneficial by many.
- Administrative and logistical support by Unisa during studies must be improved.
- Classroom management and administrative skills for graduates require attention.
- Practical experience seems to be lacking for all education students in South Africa, but many of the comments suggest that graduates need to gain these through employment and cannot solely be fulfilled by the Higher Education Institution.

It seems that the College of Education at Unisa is doing well in equipping graduates for the world of teaching. The College may benefit from examining supervision practices and management of logistics around supervision and mentorship. Many of the logistical and administrative issues around study at Unisa stretch beyond the college to institutional barriers, which need to be addressed. Although Unisa has a dedicated module on classroom management, this still seems to be a challenge amongst graduates, and it may be worthwhile to integrate components of this throughout all the years of study.

The study illustrates the value of employer surveys for guiding curriculum design and institutional support. Such surveys are challenging as centralised databases of employers often do not exist. Education is an area where employer surveys can be more easily administered as countries have central repositories. This may be similar for other fields which fall under professional bodies.

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