MERSETA EMPLOYABILITY IN ENGINEERING SURVEY

2012

IN PARTNERSHIP WITH

Developed by

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All three investigations were mostly qualitative in nature and only had very few quantitative questions. This qualitative approach helped us to better understand various aspects pertaining to the research objective.

The Heads of Colleges and Employers were consulted through the use of face-to-face structured interviews, whilst the Students group completed telephonic surveys.

Each respondent group had the following sample target:

- Employer – 60 (All 60 was achieved)
- Heads of College – 30 (26 was achieved)
- Students – 60 (All 60 was achieved)

The Employer sample was proportionally split between 5 identified areas (Gauteng, Cape Town, Durban, Port Elizabeth and Bloemfontein). Due to a limited amount of names, we decided that any Head of College could be interviewed on a specific list. These Heads of Colleges are situated in Gauteng, KwaZulu-Natal, Eastern Cape, Western Cape and Free State. Finally, graduates from 7 FET Colleges across South Africa were interviewed and formed part of the Students sample. Graduates came from 3 colleges in Gauteng, 2 in KwaZulu-Natal, 1 in the Eastern Cape and 1 in the Western Cape.

Students' snapshot

Students in general have struggled to get jobs upon graduation. A lot of students weren't very positive about their future in the industry, but despite this, they were still inclined to recommend FET College to their friends, family and colleagues.

Students were thankful for the skills they were taught and believed that these skills were valuable going forward. They were especially thankful for the practical skills and experience they obtained whilst studying at FET College. They also acknowledged the role played by lecturers (capabilities), as well as the theory component of the work. There were some students that felt that there was a lack of practical experience and that too much emphasis was being placed on the theoretical component of the work.

Their main recommendations to FET College would be to further assist them in getting jobs, as well as expose them to even more practical experience. The most important focus point for FET College should therefore be to provide assistance to students in getting jobs after they have graduated from FET College. This can be done through improved links between FET College and the applicable surrounding work environment.

From a student's perspective there are still a lot of positive aspects around FET College. As mentioned, students spoke positively about the practical skills transfer, as well as the role played by lecturers (capabilities). In terms of continuing student satisfaction, this can be seen as being very important; FET Colleges around South Africa should therefore be encouraged to investigate the existence of this within their own specific college. The capabilities of the lecturer and the alignment of their approach are especially important.

Employers' snapshot

There were a lot of employers who indicated that they didn't have any kind of relationship with FET College. Those who did have a relationship had a relationship due to their own employees studying there, their recruitment of FET graduates or FET students gaining practical experience at their companies. On average, companies employed 15 employees in the last year, but of those, only one on average came from FET College.

The most important criteria they looked for in employees were skills, attitude, experience, knowledge and some personality attributes. They desired graduates that had relevant skills and had the right aptitude for the job. According to them, the most positive aspects of FET graduates were their knowledge, willingness to learn and their enthusiasm, whilst the most negative aspect was a lack of practical experience.

Employers thought higher of university graduates and felt that there degrees were of a higher standard. Respondents were divided on apprenticeships and learnerships and believed that both of these had positive and negative qualities. They felt that FET Colleges should provide more practical exposure to their students, provide them with more practical skills and improve their facilities. There were also a couple of respondents that questioned the quality of the lecturers and suggested that this be improved. Companies felt that they should provide more training and do more to develop a link between them and FET College.

Finally they felt that the government should provide more funding to FET College and do more to improve the overall quality of FET College. They also felt that FET College should better understand the needs of the industry and do more to improve their overall quality.

The most important aspect that needs attention is the potential disconnect between the skills of FET College graduates that enter the market and the skills desired by companies in the relevant industries. It is imperative that the current skills transfer is aligned with the desired skills transfer. This will be made possible through discussions between companies and the relevant role players that decide the course content at FET College. Content revision then needs to take place so that this can be aligned with the desired skills and therefore enhance the job prospects of FET College graduates.

Heads of College snapshot

In general, Heads of Colleges were a lot more positive about FET College. They felt that the relationship between them and companies was the key to graduates getting job placements. In most cases, they felt equipped to train students for the job market. The reasons they felt equipped was the quality of programmes, the lecturer and the facilities. There were some respondents that felt that lecturers still lacked some quality and that this needed to be addressed.

They felt that FET College should focus on the quality of training, as well as the type of students they take in to improve the quality of graduates. They also felt they needed to better understand the needs of the industry and provide more practical experience to their learners. They felt that companies weren't as receptive to FET graduates and that this was due to a misconception of the NCV programme and the influence of the media.

They felt that there were both positive and negative aspects when it came to the college and the students, but still felt that other tertiary graduates didn't have any advantages over FET graduates. According to them, government could do more by bringing all higher education institutes closer and by providing more funding and bursaries. They also felt that FET College could improve the quality of their training and better understand the industry's needs.

The concept of quality is something that was mentioned on numerous occassions by Heads of Colleges. The most regularly mentioned aspect around this was the quality of training. Further discussions should be held with key role players to identify what the needs around this is and whether these needs can be implemented. Mentions were made of the lecturers, as well as the facilities and could be potential areas of investigation.

There is also an acknowledgement by Heads of Colleges of the disconnect between the current skills offered by FET College and those desired by the relevant industries. This aspect was mentioned across two different groups (Heads of Colleges and Employers) and can therefore be seen as being important enough to warrant investigation and implementation.

2. Project Information

2.1 Background to study

The study was undertaken to evaluate employability in the engineering industry through the eyes of recently graduated students, heads of FET colleges and employers from various companies, operating in merSETA sectors and sub-sectors. Each of these groups took part in a unique measurement that was custom designed to investigate their views on employability in the engineering industry.

All three investigations were mostly qualitative in nature and only had very few quantitative questions. This qualitative approach helped us to better understand various aspects pertaining to the research objective.

Feedback from the 3 groups of respondents was analysed using Consulta's text analytics software program, CENTIM. CENTIM allows for the identifcation of what was mentioned, as we aim to understand the sentiment behind each response given.

The research results in this report were obtained through careful analysis and interpretation of data provided through CENTIM. CENTIM acted as a guideline to what was being said. The guideline was then applied to a data file that contained all the verbatim responses. From there, questions were analysed and the findings are reported in this document.

2.2 How to approach this report

Each of the three respondent groups has been allocated its own section within this report. Relevant questions were grouped together (i.e. positive and negative aspects were two

separate questions, but have been combined in the analysis) to provide a more holistic view on a specific topic. Each section was approached in the same manner to allow for consistency throughout the report. The following layout formed the basis of each subsection within the report:

- The question(s) is/are stated for each section of the report.
- The main aspects identified in the analysis are unpacked to provide insights into the findings.
- Verbatims are provided as examples of what was communicated by respondents. These verbatims provide for nuanced understanding and are mentioned in support of the overall research findings.

2.3 Research methodology

The Heads of Colleges and Employers were consulted through the use of face-to-face structured interviews, whilst the Students group completed telephonic surveys.

Each respondent group had the following sample target:

- Employer – 60 (All 60 was achieved)
- Heads of College – 30 (26 was achieved)
- Students – 60 (All 60 was achieved)

The Employer sample was proportionally split between 5 identified areas (Gauteng, Cape Town, Durban, Port Elizabeth and Bloemfontein). Due to a limited amount of names, we decided that any Head of College could be interviewed on a specific list. There was originally decided to also survey Students through the use of face-to-face surveys, but this was later changed to telephonic surveys. We realised that the Students had graduated from the FET College and therefore did not necessarily reside in the same vicinity. This presented potential logistical difficulties, hence the telephonic survey. Upon discussion with merSETA, it was decided to make use of the telephonic surveys. This approach allowed us to contact students, irrespective of their geographical location within South Africa. The

biggest challenges surrounding this were the availability of contact lists, as higher education institutions aren't allowed to disclose contact information to third parties. This was rectified through the involvement of merSETA; merSETA requested the identified FET Colleges to supply these contact lists to the researchers. The researchers obtained the contact details of 495 students. Fieldwork was conducted during September and October 2012.

A total of 10 colleges are represented in this report, either through a Head of College at a specific FET College, or through a student who attended one of these colleges. For purposes of anonymity, these colleges were assigned random titles. Four colleges in Gauteng were assigned the titles A1, A2, A3 and A4. In the Western Cape four colleges were assigned the titles B1, B2, B3 and B4 while two colleges in Kwazulu – Natal were assigned the title C1 and C2. Finally, two colleges in the Free State were assigned the titles D1 and D2, while a college in the Eastern Cape was assigned the title E1.

For ease of reading, the demographic profile of the 3 groups has been included at the start of each of their sections.

Finally, it is important to unpack the approach in terms of interpreting results. All 3 respondent group investigations were primarily qualitative in nature, with a limited amount of quantitative questions within each of these measurements. The significant difference in certain quantitative results (e.g. 70% agreement versus 40%) should therefore be interpreted with extreme caution, as the difference between certain results can be attributed in the different perceptions of only a few respondents. More focus should therefore be placed on the qualitative responses, as these mostly reflect the views of two or more respondents on a specific aspect, and in some of these aspects these two respondents can be from different provinces, industries, etc.

The questionnaire for each of the three measurements has been included and can be found in Annexure A.

3. Graduates' perception of employability in the engineering industry

The analysis and key findings of the Graduates' perception of employability in the engineering industry is organised as follows:

The satisfaction of graduates with the skills they were taught at a FET college. Almost all of the respondents indicated that they were happy with the skills that they were taught at a FET college. The reason behind their satisfaction is therefore unpacked in more detail, with a brief overview of the unsatisfied respondents discussed following thereafter. The level of practical and industry exposure offered at a FET college is then discussed. Respondents that were satisfied with the level of exposure is discussed first and then followed by respondents that weren't satisfied with the level of exposure. The difference between the two groups is then investigated and summarized.

Respondents are then asked to indicate how well they feel equipped with their jobs and the job market. Most of the respondents indicated that they feel well equipped; their reasons behind this are investigated in detail. Respondents that didn't feel well equipped are briefly discussed and unpacked. The experience of job hunting upon graduation is then investigated. Respondents then indicate the aspects they believe is lacking at the course they took at FET. Finally, respondents are asked to recommend how they believe FET colleges can better prepare graduates for the industry.

3.1 Profile of students

A brief profile of the students is outlined below. At a universal level, it should be noted that all of the students graduated from FET Colleges somewhere between the last quarter of 2011 and the second quarter of 2012; these were thus students that graduated from FET College within a year from when the interview took place. Students came from 3 colleges in Gauteng, 2 in KwaZulu – Natal, 1 in the Eastern Cape and 1 in the Western Cape.

Respondents were asked to indicate their gender, cultural group, age and income, as well as indicating whether they were employed in the engineering industry or not. These results were quantified in charts and are indicated below.

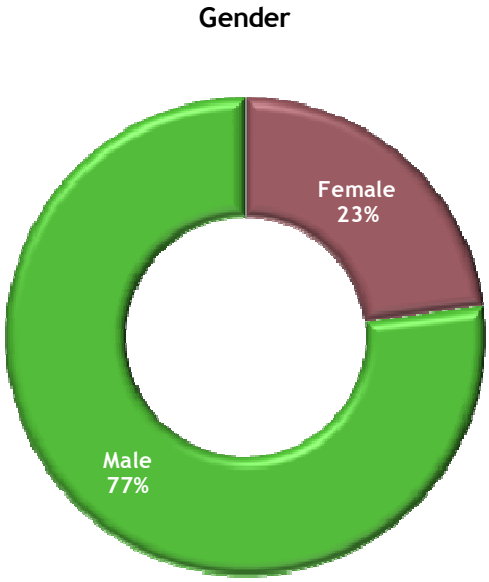


Figure 1: Student gender

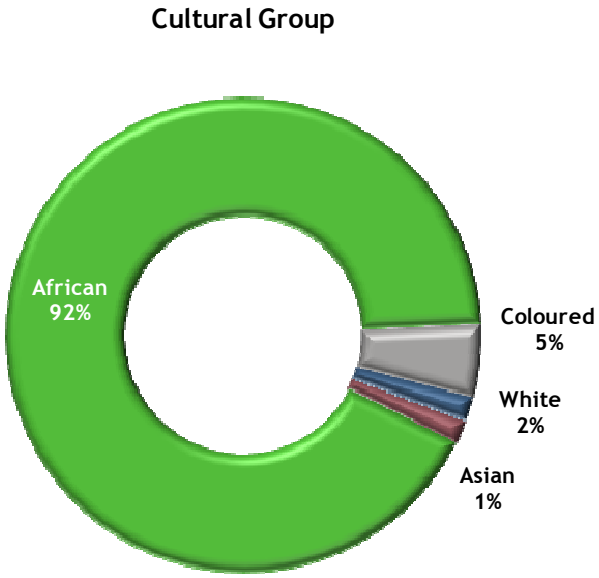


Figure 2: Student Cultural group

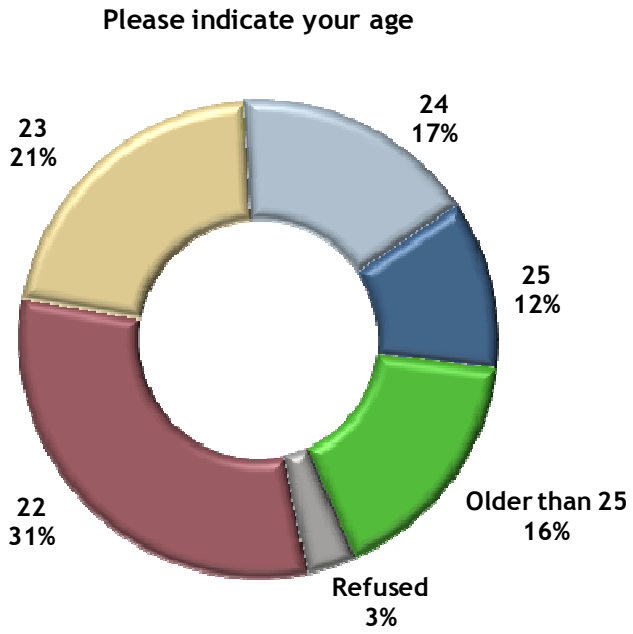


Figure 3: Student Age

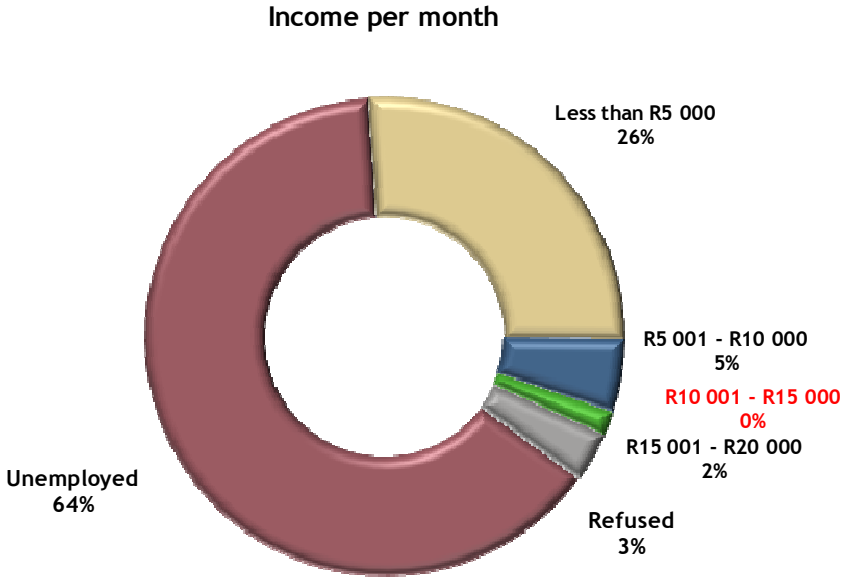


Figure 4: Student Income

Students were asked the following question: "Are you currently employed in the engineering industry?"

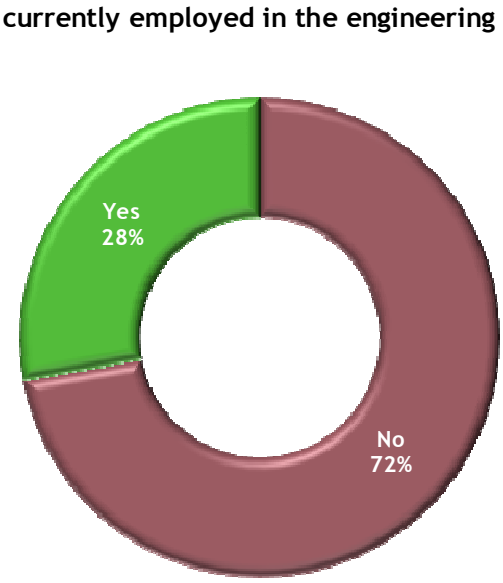
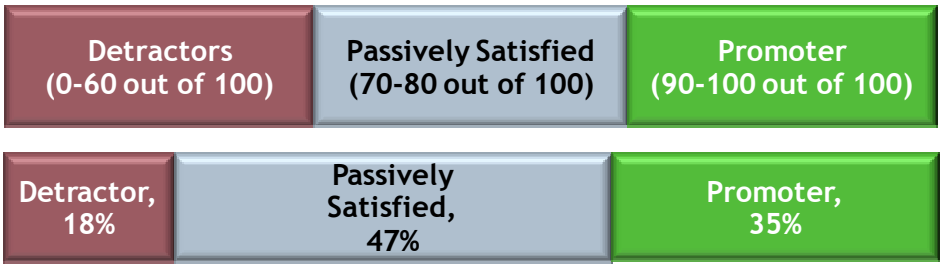


Figure 5: Current employment state of Student

Students were also asked the following Net Promoter Score question: “How likely are you to recommend FET colleges to friends and family interested in a career in engineering?”

The Net Promoter Score (NPS) is an internationally acknowledged question that indicates the likelihood of a respondent recommending an entity (FET College in this instance) to a friend, family member or colleague. This question was developed by Fred Reicheld and was first introduced in the 2003 Harvard Business Review article "One Number You Need to Grow". This question is seen as a tool to gauge the loyalty to an entity (in this case, FET College). Respondents who give 0 to 6 out of 10 are labelled Detractors; those who give 7 or 8 out of 10 are labelled Passively Satisfied, whilst those who scored 9 or 10 out of 10 are labelled Promoters. Detractors are people that would advise people not to make use of a specific company; Promoters are people that would recommend that company actively, whilst Passively Satisfied people wouldn’t do one of those two. The NPS score is calculated by subtracting Detractors from Promoters (Promoters – Detractors = NPS score).



NPS Score = 17%

Figure 6: Student Net Promoter Score

One interesting finding was the difference in detractors based on employment in the engineering industry. Only 8.3% of graduates who were employed in the engineering industry gave scores of 0 to 6 (Detractors), while this increased to 25.0% for graduates who weren't employed in the engineering industry. This could possibly indicate an unfulfilled expectancy, as graduates possibly expected a job in the engineering industry due to their FET qualification, but there is no evidence to substantiate this at this time.

3.2 Satisfaction with the skills taught at a FET college

Respondents were asked the following question: "Are you generally happy with the skills you were taught at FET College?"

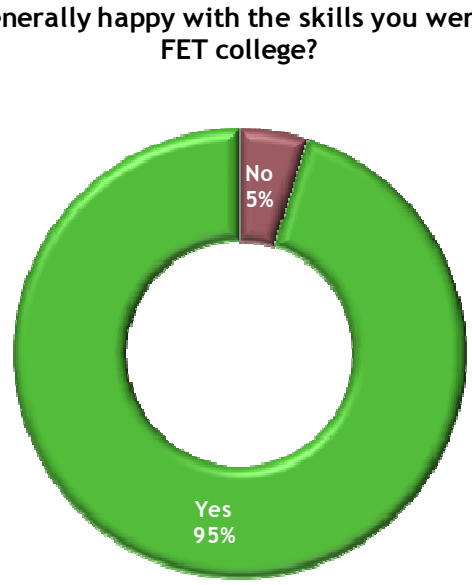


Figure 7: Student satisfaction with skills

Almost all of the respondents indicated that they were happy with the skills they were taught. Their main reasons for satisfaction are the following aspects, which are discussed further on below:

a) *The impact of practicals*
b) *They learned a lot*
c) *It provided them with a good foundation*
d) *They learned a lot of theory*
e) *The lecturers taught them well*

2.2.1 The impact of practicals

The biggest source of satisfaction with regards to skills being taught was the impact of practicals. Respondents felt that they benefited from these practical sessions and that the experience from this would have an impact on them going forward. Three respondents from college A4 in Gauteng said the following: "We have done practicals and it gives me an advantage because I have learned from the college" (unemployed African male), "I benefit from the practicals we did" (employed African male) and "I am happy because I learnt so

much about the practical part and not just the theory" (unemployed African female). It can therefore be seen that this experience is shared by almost all of the respondents, irrespective of their gender or current employment status. Further investigation also indicated that the impact of practicals was mentioned with most of the colleges, therefore indicating this positive aspect as something that is felt across all of the colleges.

2.2.2 They learned a lot

A lot of graduates showed gratitude for what they learned. It is interesting to note that most of the students that mentioned "learning a lot" as a reason were still unemployed, possibly indicating that they believe these skills to be valuable going forward. These respondents were mostly male and were equally spread between Detractors, Passively Satisfieds and Promoters (please refer to NPS score in 2.1). This indicates that they acknowledge the skills that were taught, but wouldn't necessarily recommend FET College to other people. They were satisfied as they would somewhere be able to apply that which they had learned at a FET college. This feeling can be summarized in the following comment, made by an unemployed African male that graduated from A1 in Gauteng: "The skill will help me and they taught me a lot of things that will help me to start somewhere".

2.2.3 It provided them with a good foundation

Graduates felt they were given a good foundation for the future due to the platform provided to them by the FET colleges. The foundation has assisted them after college in both their work environments and private lives. Some of the comments included the following: "I am able to do a lot of things at home and people come to me because I have the skills" and "It was a good platform. Obviously I did not know anything about engineering and they taught me well".

2.2.4 They learned a lot of theory

Graduates acknowledged the theory that they had learned while attending a FET college. Most of the comments around theory were mentioned along with comments made about practical experience, thus indicating that students received both forms of teaching at the

colleges. Comments included the following: “It’s the only place that taught me the theory and the practical” and “I am happy because I have done my practical and theory”.

2.2.5 The lecturers taught them well

The final aspect that was mentioned regularly was the teaching abilities of lecturers and how this contributed to satisfaction. Graduates indicated that lecturers taught them well and made it possible for them to understand the theory they had to take in. This can be summarized by the following comment: “They made us understand very well. It was easy to learn.”

2.2.6 Aspects that resulted in dissatisfaction

Only a few aspects resulted in any form of dissatisfaction from graduates. These aspects were only mentioned occasionally, thus indicating that these were isolated incidents. These aspects included a shortage of lecturers for some subjects, no access to workshops and not enough practical exposure or experience. Comments for those aspects included the following: “At some of the times during the year we did not have lecturers for some of the subjects. We also did not go to workshops because there was not enough material” and “When it comes to the industry we don't get exposed to the field”.

3.3 Level of practical and industry exposure offered by courses at FET colleges

Respondents were asked the following question: “Do you feel that the course offered at FET college level gave you enough practical / industry exposure?”

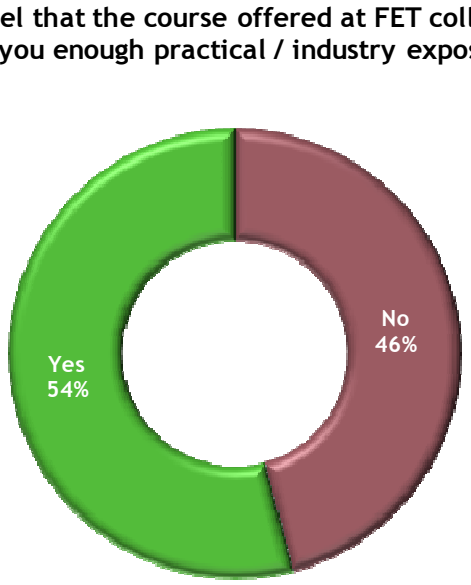


Figure 8: Practical exposure offered by course

Only 54% of graduates felt that the course they attended offered them enough practical or industry exposure. This score indicates a clear divide in opinion on this matter. Positive responses on this matter is first discussed and then followed by negative responses.

2.3.1 Graduates who felt the course offered enough exposure

Just over half of the graduates that felt the course offered enough exposure specifically made reference of *the amount of practical exposure they received*. A lot of them felt that it was enough and that it assisted them in their future jobs. They also feel that this practical exposure can be applied to any engineering industry type. Comments related to industry exposure included the following: "I think I received enough exposure with the practicals and we can apply this skill to the industry" and "What they taught me is what I required in the field".

The other main aspect that came through was the fact that the *skills can be applied*. Responses on this aspect were very positive, with specific reference to the relevancy of the skills acquired. Another noticeable mention around this aspect was the fact that graduates didn't feel out of place in their workplace. Four graduates implied that the skills obtained would fit into the work environment. One interesting aspect to note was that all four

graduates graduated from college A4 in Gauteng. Both of these aspects can be summarized through the following comments: “Because what they taught me is applied in the engineering world” (made by an unemployed African male) and “At the college I did fitting and turning and they gave us time to handle the machine. Now I do not struggle to do that in my job.” (made by an employed African female who has an income of less than R5000 per month).

2.3.2 Graduates who felt the course didn’t offer enough exposure

The two main reasons why graduates didn’t feel the course offered enough exposure was:

a) *A lack of proper practical exposure* and
b) *Too much theory*

Some of the respondents indicated that they only received theoretical exposure and little or no practical exposure; in addition some indicated that not enough time was given to them when they were busy with practical experience. The aspect of too much theory seemed to correlate with a lack of proper practical exposure. These aspects weren’t limited to a specific course or college and were spread across the whole spectrum, thus indicating a problem on a broader scale.

Some of the comments included the following: “The practical was not good enough, we were not given enough time to practice to develop” and “Basically we need more time for practicals and less time for theory”. Another mention that could be investigated further is the following: “There are some things we don’t get to do and by the end of the year we never did it.” This indicates that there could be instances where some of the teaching aspects are overlooked.

2.3.3 Analysis of difference between positive and negative responses

Two distinct themes can be identified between graduates who gave positive responses and those who gave negative responses. In more than half of the instances, a sufficient amount of practical exposure resulted in a positive response, while the negative response

mentioned the most referred to a lack of proper exposure. This concern can thus be addressed by sufficient practical exposure for all FET students.

The second theme revolved around the theoretical aspect. The second most positive mention, *skills can be applied*, can indirectly be seen as a contrast to the second most negative mention, *too much theory*. A focus on too much theory at FET colleges can lead to graduates being underprepared in terms of their practical skills once they leave the college. A balance between the two should therefore be found, thus ensuring that graduates have sufficient theoretical and practical experience upon graduation.

3.4 Feeling equipped in the job market

Respondents were asked the following 2 questions: "Did you feel well equipped for the job market after college?" and "Do you feel well equipped for the job you currently hold?"

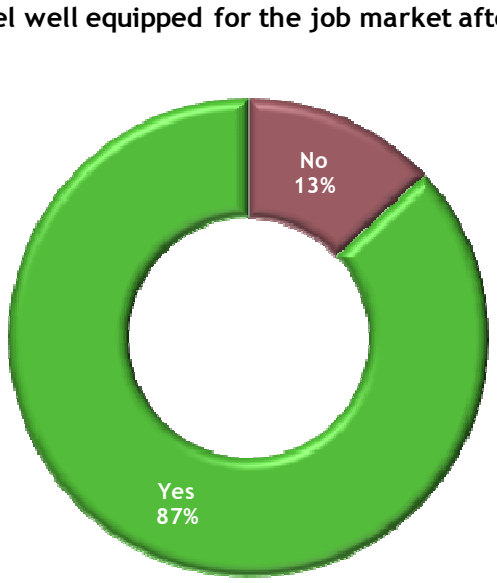


Figure 9: Feeling equipped for the job market after college

Eighty seven percent of graduates felt well equipped for the job market after college. This reflects positively on FET colleges and indicates that most respondents are satisfied with

the overall education they received. Their main reasons for feeling well equipped are the following, which are discussed further on below:

a) *They have the applicable skills needed for their job*
b) *They learned a lot of things*
c) *They've had sufficient practical exposure*

Graduates who don't feel equipped for the job market are also briefly discussed in 2.4.4.

A slightly lower percentage of graduates (77%) felt equipped for the position in which they were currently employed. Even though the percentage is slightly lower, it is still a good score and reflects positively on FET colleges.

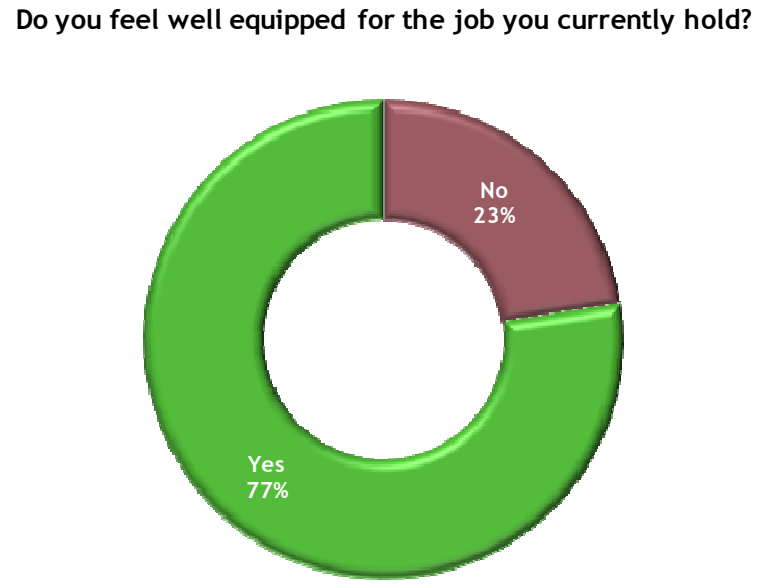


Figure 10: Feeling equipped for your current job

2.4.1 Applicable skills needed for jobs

The acquisition of applicable job skills was the main reason why respondents felt equipped for the job market (27%). Graduates mentioned the relevancy of the skills within the workplace. Mentions were also made of the fact that the work environment felt similar to the practicals experienced at FET colleges. Some of the comments included the following: "What I was doing in college is similar to the work environment", "It is relevant because

the machines I learned with are being used at my job at the moment" and "I have the skills that are required".

2.4.2 Learning a lot of things

The fact that they learned a lot of things was the second highest mention for this specific question with 18%. Some of the graduates indicated that they were ready for the job market and that they had enough skills. Some of the comments included the following: "I am well equipped because I did practicals and theory for 3 years, which is a lot" and "I learned a lot of things during my experience with the college".

2.4.3 Having sufficient practical exposure

Graduates indicated that sufficient practical exposure was the main reason why they felt well equipped for the job market. Emphasis was especially placed on how these practical skills have assisted graduates with their new jobs. Some of the comments included the following: "I think the things we have learned will help us in the industry" and "Most practical skills are hand skills and I can identify with them in the workplace" (made by an employed African male).

2.4.4 Graduates who didn't feel equipped for the job market

The only reason mentioned why graduates didn't feel equipped for the job market was that they felt they didn't have enough practical exposure. Other comments made include a lack of relevant experience, as well as FET not informing graduates about the relevancy of their NCV qualification.

3.5 The experience of job hunting

Respondents were asked the following question: "Tell us about your experience in hunting for jobs after you graduated?"

Most of the respondents indicated some form of difficulty in getting a job. These difficulties are discussed below. Respondents who found it easier to get a job are then discussed.

2.5.1 Respondents who experienced difficulty

53% of respondents indicated that they were still struggling to get a job and haven't had any success up until the time of the survey. Most of them indicated that they regularly apply for positions but receive negative feedback on their applications. In cases where they did receive feedback, numerous reasons were given why there weren't successful in their application. These include a lack of experience or having too much theoretical experience and too little practical experience. In one instance a respondent indicated that companies didn't regard his qualification and only acknowledged N-level qualifications.

Some of the comments include the following: "I apply everywhere and I don't get any feedback", "It's been tough time hunting through different sectors. They only regard N-courses", "I was hunting for 9 months and you are marketing yourself but it is difficult because your skills are limited to theory only" and "It is difficult because I have applied for many jobs since January this year but have not been called for an interview".

2.5.2 Respondents who found it easier to get a job

7% of respondents indicated that they found it very easy to get a job. There wasn't a centralised theme as to why they managed to get a job so quickly. In fact, one respondent indicated that it was more luck than anything that he didn't have to wait too long to get a job, while another respondent indicated that he already received a job offer while still writing his exams. A few respondents indicated that they managed to get jobs in unrelated industries, whilst a few respondents also received bursaries from Eskom to further their studies. There were also some respondents that indicated that FET was willing to assist them with the job hunting process and were busy looking for job placements on their behalf. B1, A2 and A4 were identified as 3 such colleges that helped students.

Some of the comments include the following: "They offered me a contract when I was writing exams", "I currently have a bursary at Eskom so I will begin my training there, so I have not been job hunting", "Actually it was not very difficult, the school offered and tried to search for jobs for there students" and "It was not that difficult. I started here in

February after graduating last year. I took this job because then it is easier to apply for internal posts that will become available".

3.6 What respondents believe is lacking in a FET course

Respondents were asked the following question: "Please mention the aspects you believe were lacking in the course you did at FET?"

Thirty eight percent of respondents indicated that they felt the course was sufficient and that nothing lacked. The remaining 62% had various opinions on aspects they believed lack in the FET courses. These various opinions are discussed below.

2.6.1 What respondents indicated is lacking in a FET course

Practical exposure - 12% of the responses referred to a lack of practical expsoure. These respondents indicated that too few practical sessions with relevant machines were given. Some respondents also indicated that there was too much theoretical knowledge. Some of the comments included: "They should provide more practical and more machines" and "In practical, there must be more practical than theory according to me".

Not enough materials, tools or machines – 22% of respondents indicated that there was either a lack of materials, tools or machines at their FET College. One respondent indicated that a lack of materials resulted in group work, instead of individual exposure for an individual, whilst another respondent indicated that there weren't enough materials and tools for students to gain practical experience. In other instances, respondents indicated that tools were missing from workshops and that the machines in the workshops were broken. Both these situations influenced their ability to gain practical experience. Some of the comments included: "Provide more machines in the practical workshops. Like the milling machines were not enough so I never really got a chance to do it alone. We did it in groups and I did not get to do it alone at all", "I can say there weren't enough machines to

use. Some of the machines were broken" and "At the college we lacked materials and tools to conduct our practicals".

Workshop or lecturer limitation – Finally, 12% of respondents either indicated a limitation in the lecturer or the workshop at the FET College. One respondent indicated that there was a lack of good teachers at FET Colleges and this resulted in students skipping classes, whilst another respondent indicated that the workshops were either too small or there wasn't enough at a college. Some of the comments included: "There are a lot of students but they end up teaching a lot of theory because there is not enough workshops" and "Sometimes the lecturer isn't capable of explaining something".

3.7 Student recommendation to FET

The final part of this Student report involves their recommendation to FET colleges. Respondents were asked the following question: "What would be your recommendations on how FET colleges can better prepare graduates for the industry?"

Forty four percent of all responses referred to aspects pertaining to job placement, whilst 22% referred to the need for practical experience. These two aspects are unpacked below and then followed by a section on the main remaining recommendations as communicated by respondents.

2.7.1 Aspects pertaining to job placement

Only two aspects were identified, but they each received 22% of the mentions. These aspects are the following:

a) Assistance in getting jobs
b) Providing a link to the work environment

Assistance in getting jobs

Students gave recognition to the role that FET colleges were already playing in helping them to get jobs, such as the distribution of their CV's and job hunting on students behalf (as mentioned in 2.5.2). They did however suggest that the CV's of graduates should be distributed to even more companies. One respondent also indicated that teachers should guide students through the what's and how's of looking for jobs after graduation. Some of the comments included: "They should distribute our CV's even further and talk for us" and "They must keep on looking for the jobs for the students, like they are doing now".

Providing a link to the work environment

Students wanted FET colleges to provide them with more interaction with companies in the surrounding areas. This was specifically aimed at getting a job, but also included aspects such as companies coming to a college to talk to students or providing them with links to holiday jobs. Some of the comments included the following: "During the year FET should propose to other companies to come to us and give guidance and advise us on how and where to apply for jobs" and "They need to introduce students to companies and maybe work holiday jobs".

2.7.2 The need for practical experience

Students indicated that practical experience was key to their education and that more was needed to prepare them for the job market. One student indicated that colleges should provide students with a certificate as proof of practical experience, whilst another indicated that practical experience was important to companies. Some of the comments included the following: "They should give students more practical experience" and "If there is a way that they can allow us to do more practicals and give a certificate as proof that you have done the practicals and this proof should be recognised by companies in the industry".

2.7.3 Remaining recommendations

Some of the other recommendations made by students included the following:

- Workshops should have enough space
- Students should have all the materials they need
- Consulting with industries about what needs to be learned
- Improved communication with students

Some of the comments include the following: “They should have enough space for workshops, enough materials for practicals and they should also advise students on what they should do after graduating” and “They should consult more with industries on what we are doing. You may find that some of the things that we do you are not going to come across in the industry. They need to speak to the industry people more to see what they want and what they are looking for”.

4. Employers' perception of employability in the engineering industry

The analysis and key findings of the Employers perception of employability in the engineering industry is organised as follows:

The relationships employers have with FET colleges are firstly discussed. They are then asked to indicate the number of FET trained graduates and graduates from other institutions they appointed within the last year, as well as providing a reason for the amount appointed. They then indicate the criteria's, skills and attitudes they look for when appointing somebody, as well as any applicable equity dimensions that are taken into consideration.

Employer's negative and positive perceptions of FET employees are then discussed, as are their perceptions of the skills and qualifications of FET graduates in comparison to those of other tertiary institutions. The comparison between learnerships and apprenticeships are then indicated, as well as employer's preference between the two of them. Interventions to be done by employers, as well as FET colleges, to improve the quality of students are then discussed. Finally, the roles of government, FET colleges and SETA's in stronger delivery between FET colleges and employer demands in the engineering sectors are discussed.

4.1 Profile of employers

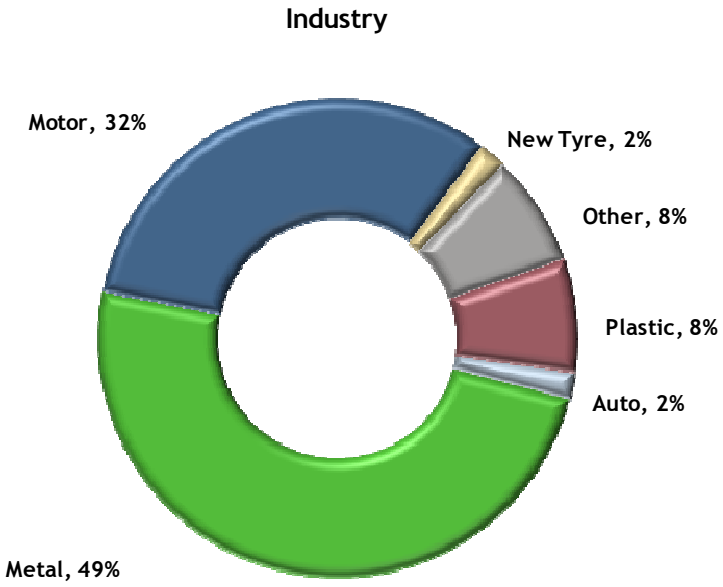


Figure 11: Industry employer operates in

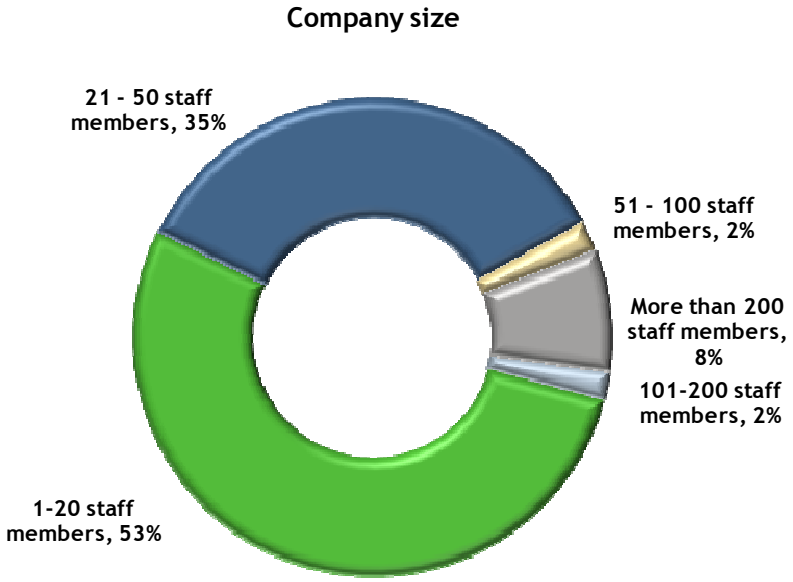


Figure 12: Company size

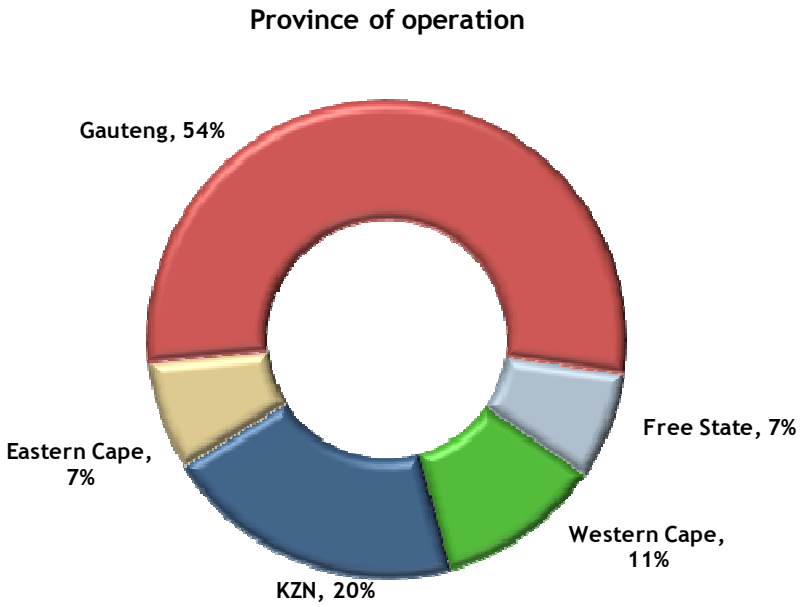


Figure 13: Province employer operates in

Employers were asked two statement questions around the overall competency of tertiary institutions.

On a scale from -5 to +5, where -5 indicates "Much worse than expected" and +5 indicates "Much better than expected", please rate the following statements.	
Please rate the overall competency of FET graduates you come in contact with	57.3
Please rate the overall competency of other graduates you come in contact with	65.6
Average score for both statements	**61.7**

Figure 14: Competency statements

There is a noticeable difference in employers' perception, as they gave graduates from other tertiary institutions an average score that was 8.3 points higher than those from FET colleges.

We did an additional calculation to determine the percentage of respondents that gave very low scores (Failures = 0-20%), mid range scores (Indifference = 30-70%) and very high scores (Excellence = 80-100%). In essence, Failure, Indifference and Excellence can be summarized in the following way:

Failure = Respondents who perceive an aspect as being very bad
Indifference = Respondents who perceive an aspect as being average
Excellence = Respondents who perceive an aspect as being very good

The range calculation of the two statements above gave through the following percentages:

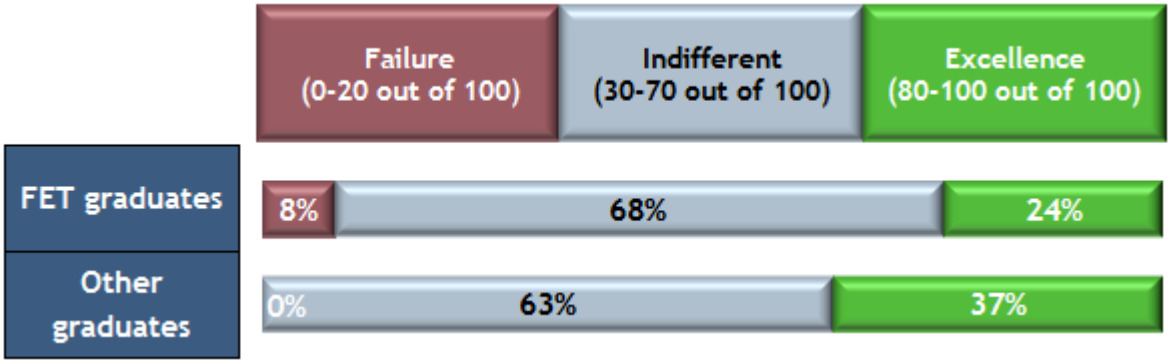


Figure 15: Overall competency ranges

13% more respondents perceived graduates from other institutions as being very competent, whilst 8% of respondents perceived FET graduates as not being very competent. Of more concern is the fact that graduates perceived both sets of students as not being very competent.

Respondents were also asked to indicate the likelihood that they would employ graduates from FET colleges, as well as those from other institutions.

On a scale from 0 to 10, where 0 indicates "Not likely at all" and 10 indicates "Extremely likely", please rate the following statements.	
How likely are you to employ graduates from FET colleges in the next 12 months?	42.0
How likely are you to employ graduates from other tertiary institutions in the next 12 months?	43.4
Average score for both statements	**42.7**

Figure 16: Likelihood to employ statements

The same range calculations as those above were applied and gave through the following results on these statements:

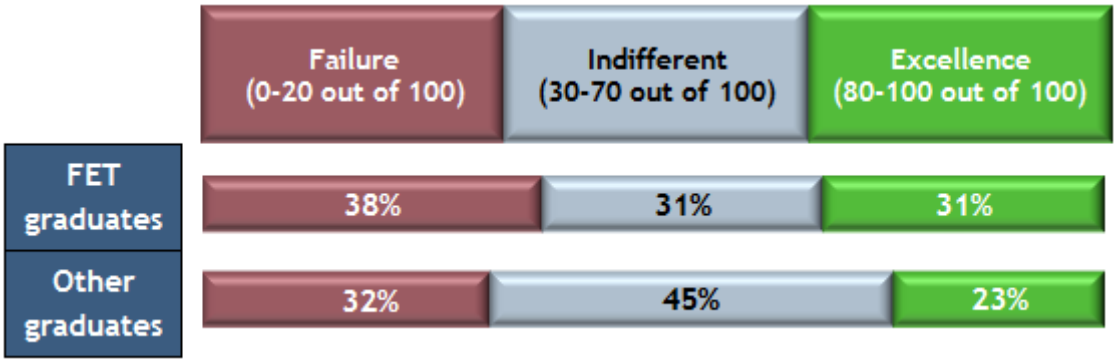
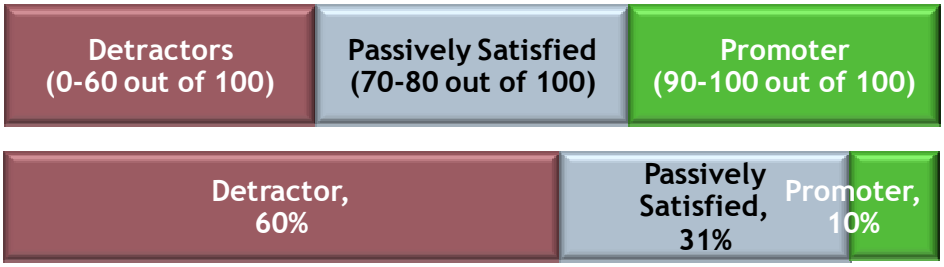


Figure 17: Likelihood to employ ranges

FET College had 8% more Excellence ratings, but also had 6% more Failure ratings. However, there is no clear preference for graduates from either FET colleges or other institutions.

Finally, respondents were also asked 2 NPS questions. The question, as well as the applicable result, has been indicated below.

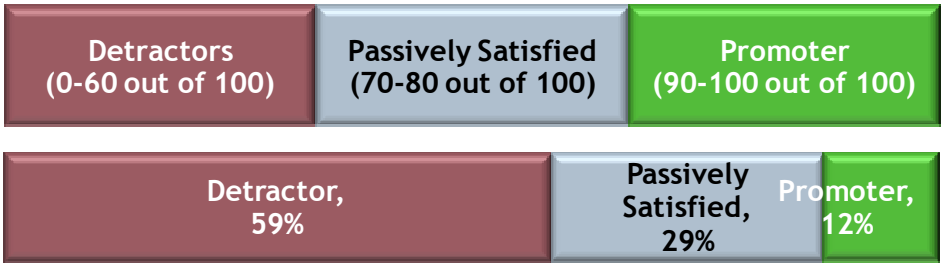
"How likely are you to recommend graduates from FET colleges to other companies?"



NPS Score = -50%

Figure 18: Employee NPS for FET College

How likely are you to recommend graduates from other tertiary institutions to other companies?



NPS Score = -47%

Figure 19: Employee NPS for other tertiary institutions

In both instances, respondents would be more inclined to advise people against employing graduates. Unfortunately, no reason behind these answers can be provided as respondents weren't asked to elaborate on this question. The scores are both very negative and should be an area of concern for FET College. Geographically, the Eastern Cape and Durban areas had the most positive scores for the FET statement, whilst Cape Town and the Free State areas had the most negative scores for this statement. It should be remembered that the

samples for all of these regions are very small and that this should be interpreted with caution. It's also important to note that quite a number of employers didn't answer these questions, as they didn't feel qualified to give an accurate answer. No clear reason for this was provided, but it's possible that they didn't have any interaction with recent graduates from FET Colleges or other tertiary institutions.

4.2 Relationships between FET colleges and employers

Employers were asked to indicate the nature of their relationship with FET colleges. Three main themes came out the responses provided by employers:

a) Employers who had no relationships with FET colleges
b) Employers who had employees who studied at a FET college
c) FET students who did their practical experience at a company

3.2.1 Employers who didn't have a relationship with a FET college

Most of employers indicated that they didn't have a relationship with FET College. A few respondents indicated that they didn't know what a FET College was or that they have heard about it, but don't really know what it is about. This indicates that most employers knew about FET College and its role in education.

3.2.2 Employers who have employees that studies at a FET college

These employers had some kind of relationship with FET College through their own employees that studied at a FET college. The strength of these relationships differed from respondent to respondent, but most of them were informal in their approach. Most of the employees decided on sending their employees to FET colleges to further their skills and development.

Some comments on employees who studied at a FET College included the following: "The relationship that we have with FET colleges is that we have employees working here for a couple of years and we encourage them to further their studies" and "We sent 3 students to the college to learn about motoring".

3.2.3 FET students who did their practical experience at a company

There were some instances where a FET student worked at the company of one of the respondents in order to gain their required practical experience. The length of practical experience wasn't mentioned, but the required practical experience came from different fields within the industry.

Some of the verbatims include the following: "In most terms we work with a FET college when they need their students to come and do their practical experience with us" and "We have in the past approached FET's to provide us with students, for mentoring and that type of thing."

4.3 Appointed graduates and reason for FET graduate appointment

Employers were first asked to indicate whether they appointed FET graduates in the recent past. As indicated below, a total of 21% of respondents indicated that they did employ a FET graduate in the recent past.

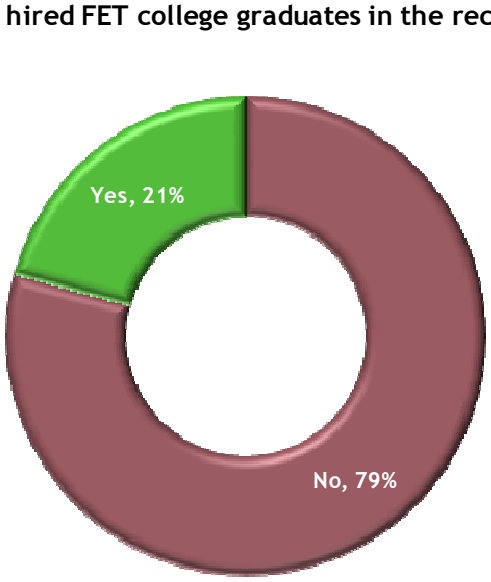


Figure 20: Appointment of FET graduates

On average, a total of 44 employees were appointed by the company's of respondents in the last year. It should be noted that one company employed 1500 employees in the last year and that this amount skewed the rest of the responses. Without that one entry, respondents on average employed 15 employees per year per company. On average, only 1 of those employees came from a FET College, thus indicating a strong preference for graduates from other institutions.

Employers were asked to explain the reason for employing or not employing FET graduates. The reason for not employing FET graduates are discussed first and then followed by the reason why FET graduates were employed.

3.3.1 Why FET graduates weren't employed

Most of the reasons for not employing FET graduates had nothing to do with FET itself, but rather the state or needs of the company. This differed from FET's schooling graduates that didn't have the prerequisite skills to work at a specific company to the current needs of the company. However, there were a few respondents that indicated that they weren't aware of a FET in their area and didn't therefore appoint a FET graduate.

The following 3 comments each relate to the aspects mentioned above: "The specifics of a FET college are not applicable in our industry", "Because I have no access to FET colleges or their advertisements" and "The only turnover we currently have is with our accounting department".

3.3.2 Why FET graduates were employed

Only 21% of respondents appointed FET graduates. Most of them didn't really indicate why they specifically employed FET graduates. A few general mentions were made of the fact that FET graduates were skilled in some kind of way, i.e. having the relevant skills or having

the relevant practical experience. One respondent also mentioned the funding he received for appointing FET graduates.

Some of the comments include the following: “We are busy employing FET graduates now, because of the availability of the fundings and so that we can actually have incentives for the company” and “They already have the basic training and basic equipment training”.

4.4 Criteria and equity dimensions taken into consideration

Employers were asked the following 3 questions:

1. “What criteria are you using to screen and select graduates for employment?”
2. “When screening for new candidates, what skills and attitudes do you look for in graduates (How would you describe the ideal graduate in terms of skills, knowledge, competencies?)”
3. “What are the required equity dimensions of employability in this industry? Are there any? (I.e. race, gender, class, age, disability profiles? What is a typical profile of students you employ?)”

The feedback provided on each question is unpacked below.

3.4.1 Criteria used to screen and select graduates for employment

The following five criteria were mentioned the most by respondents:

- Skills
- Attitude
- Experience
- Knowledge
- Personality traits

These criteria are discussed in more detail below.

Skills

In terms of skills, respondents indicated that these skills had to be relevant to the position. These skills differ from company to company and have various degrees of difficulty, but are all technical in nature. Comments included the following: "They should be able to understand electronic skills", "We deal in scarce skills and therefore people who would the best suited for the job" and "50% of our selection criteria consists of the necessary skills and attributes".

Attitude

Attitude is the only criteria that is more related to the individual than the actual job, but is seen as being just as important, if not more important, than the other identified criteria. Respondents emphasised the importance of attitude and felt that the other criteria were irrelevant if the candidate didn't have the right attitude towards the job. One respondent indicated that candidates should be eager to learn and be motivated for the job. The following comment sums this sentiment: "You can employ someone with attitude who has a little bit of knowledge and a bit of skill and then you can take that person much further than someone who has got all the degrees in the world, but with no attitude".

Experience

Relevant work experience is also something that is important to employers, as this would ensure that candidates would be familiar with their surroundings. Respondents indicated that the work experience didn't have to be extensive, but that it should at least be enough so that the candidate would fit into the company. A couple of respondents also indicated that the experience had to be relevant to the industry they were working in. Some of the comments included the following: "They need to have experience in the area that we want to employ them in", "They need to have a matric and one or two years of working experience" and "It's usually university graduates that we want, with a specific extractive metallurgy or chemical engineering background and a certain amount of experience".

Knowledge

Knowledge refers to the skills and qualifications that have been obtained by the candidate. In most instances, the skills and qualification had to be specific to the job that was advertised. There were a few respondents that indicated that candidates only needed some form of general knowledge about the job and that they would work with them from there. Some of the comments included the following: “It's usually university graduates that we want, with a specific extractive metallurgy or chemical engineering background”, “Because we do training we look at the end qualifications and that goes right up to N6. We prefer taking in someone with a qualification between N3 and N6 for apprenticeship training” and “They need to be knowledgable, they should have a fair knowledge base”.

Personality traits

Lastly respondents mentioned a diverse group of personality traits that were considered to be important. Some of the personality traits included the following:

- Willingness to learn
- Motivation
- Sharp (the ability to grasp things quickly)
- Lively
- Willingness to help
- Willingness to work overtime
- Interests

Some of the comments included the following: “I'll also find out what his interests are. It does not help if his interests are not in my business, and then he's just going to use me as a stepping stone” and “They must be spunky, lively and willing to help”.

3.4.2 Skills and attitudes desired in graduates

Two main themes were identified, namely aptitude for the job and relevant skills. These are similiar to those mentioned in the criteria above. These two themes are discussed below.

Relevant skills

Respondents indicated that graduates had to have technical skills and in most cases, specific technical skills. They should also have practical experience of these technical skills. Some respondents indicated that graduates should have a matric qualification as a minimum qualification, whilst others emphasised the importance of science and especially maths. A couple of respondents also indicated that graduates must be able to communicate, with one respondent specifically stating that graduates should properly understand English.

Some of the comments include the following: “We're looking for someone who's got some technical ability and even more so, someone who can understand and speak English”, “They should be trained in a specific function” and “Most important for us is maths and science. They must also have good communication skills”.

Personality traits

Respondents indicated that some people skills and personality traits were important when looking for the ideal graduate. Some of the skills and traits included the following:

- Positive attitude
- Friendliness
- Ability to work with customer
- Neat appearance
- Willingness to work
- Enthusiasm
- Self driven
- Self motivated
- The ability to work in a team

Some of the comments included the following: “He should be self motivated. That is first and foremost, because you don't want to stand over his shoulder everyday”, “He should be

willing to learn and be prepared to put in the effort" and "A positive attitude, as it has an influence on the rest of the staff".

3.4.3 Required equity dimensions

Through the analysis of "Yes" and "No" answers to the Equity Dimension question, we idenitifed that 70% of employers indicated that their company comply with Employment Equity and gave preference to previously disadvantaged individuals. There were also a couple of respondents that indicated that they had BEE ties and this in turn allowed them to appoint graduates using other criterias. The 30% that gave "No" answers indicated that qualifications and skills were more important to them and that they didn't mind not adhering to Employment Equity criteria. Some of these respondents indicated that they were part of small companies and that these companies didn't have to comply with Employment Equity criteria.

Figure 21: Company preference to Employment Equity

Some of the "Yes" comments on this question included the following: "We do give preference to employment equity candidates. We've currently got about 6 apprentices, of which 4 are employment equity candidates", "We have a policy where we only look at formerly disadvantaged people like Indians, Blacks and Coloureds, as well as females,

because they are not common in this industry" and "We only employ from previously disadvantaged groups and wherever possible, we employ ladies, because of the BEE Scorecard. It is for the BEE Scorecard which we need for business". Some of these companies had certain BEE criteria that they had to fulfill and this had an influence on the candidates they employed.

Some of the "No" comments on this question included the following: "If your CV is right and your attitude is right, I'll employ you", "No, we are BEE rated, but because we're a QSE we only have to comply with 4 of the 7 components" and "No not really. We're a small company. Basically it goes about skills".

4.5 Positives and negatives factors of FET graduates as employees

Positive factors

There were many respondents that did not employ FET graduates and could not therefore answer the question. The remaining respondents either referred to technical skills that were learned at FET colleges or individual personality traits that they believed were the most positive. No specific technical skills were identified, but it was indicated that these were important and relevant to the industry. The practical exposure of FET graduates was also mentioned as a positive aspect. There were also a few mentions of the importance of the theoretical component that was taught as part of the course. A diverse group of personality traits were identified by respondents. Some of them include the following:

- Knowledgeable
- Willingness to learn
- Enthusiasm
- Good attitude
- A hunger to excel
- Ambition

Some of the comments included the following: “They have a willingness to learn, a positive attitude, and they want to further their careers”, “Two or so things that stand out of FET students or graduates is that they are committed, they are knowledgable and they've got a good attitude” and “I think generally they are quite willing to learn”.

Negative factors

A few factors received numerous mentions when this question was asked of respondents. Firstly, there were respondents that felt that FET graduates still didn’t have sufficient practical experience. These graduates had the relevant theoretical knowledge, but would be out of their depth as soon as they had to operate on a practical level. Another negative aspect was the maths skills of some of the graduates. There were a few respondents who felt that graduates had limited mathematical ability and this in turn limited their capabilities to perform specific tasks within their job description.

A couple of respondents also indicated that some graduates had unrealistic expectations. One respondent indicated that a graduate wanted to start at a management level, whilst another respondent indicated that some graduates expected a lot of money when starting their jobs. Finally, there were respondents who felt that some graduates were qualified for the wrong job. One respondent indicated that a graduate might be qualified for a specific job, but that the graduate had a passion for another type of job. Another respondent questioned the screening system done on some of the graduates, as he believed they were incorrectly advised as to what they should study.

Some of the comments include the following: “A lot of them have problems with maths and science”, “They have not got the practical experience. They come here and they do not know exactly how it works and that is why we sometimes take somebody with a little more experience and not somebody directly out of college”, “The students that come from there expect very high salaries. Their expectations are very high. They think because they come from there and have the knowledge behind them they can ask whatever salary they want. They are not thinking clearly or market related. They have very high expectations” and “Often they don't get enough exposure to the practical side of stuff”.

4.6 Comparison between FET and other tertiary graduates

Employers were asked the following question: "How would you describe FET graduates in terms of attributes / traits / qualifications / skills vs. graduates from other tertiary institutions?"

Most of the respondents felt that there was a clear difference between FET graduates and those from other tertiary institutions. Both of the groups had one distinct positive and one distinct negative aspect. They were the following:

Other tertiary institutions

Positive aspect – University degrees were seen as being a higher form of qualification than those available at FET colleges. One respondent indicated that these degrees were more sought after than FET qualifications.

Negative aspect – Respondents felt that graduates from other tertiary institutions had too much theoretical knowledge and far too little practical experience. They believed that these graduates were only book smart and wouldn't really know what a job is about when they joined a company.

Comments included the following: "The qualifications that the guys get at DUT (Durban University of Technology) is far superior to the FET qualification. The FET qualifications are very, very basic. The DUT guys are very good in mathematical and basic science skills" and "He doesn't really know what goes on until he starts working with it. Now that's the kind of guy that comes out of that type of institution and goes to the site and that is a bit of a problem. Where as at the FET colleges you know the part of the fact is that they are in those simulator situations".

FET College

Positive aspect – Respondents feel that FET graduates have substantially more practical experience and more technical skills, due to working with their hands. One of the respondents felt that it was easier to employ FET graduates, as they already know what to do.

Negative aspect – The FET qualification is seen as being inferior to other tertiary qualifications. Some respondents believe that the skills that are being taught are too limited and that other tertiary qualifications equip graduates with more skills.

Some of the comments included the following: "They definitely have more practical skills. It is more applicable for the real trades that are out there" and "You've got more advanced training if you've been at an university".

4.7 The work done by FET colleges in preparing students

Respondents indicated that students still need to master certain aspects to be fully prepared for the job market. Some respondents felt that there was a lack of practical experience and that respondents are out of their place when entering the job market. There were also respondents who were concerned with the length of the courses undertaken by some students. They felt that 3 and 6 month courses were too short and that it was impossible for students to be fully prepared for the job market.

A couple of respondents were also concerned about the quality of training given to the students, as there was students allowed into the job market who still couldn't master specific skills. There were also one or two respondents who felt that some of the lecturers weren't up to standard and didn't fully understand the work environment within the industry. It should also be noted that there were respondents that felt positive about the work done by FET colleges. They acknowledged the effort put in by FET College, specifically in terms of technical knowledge.

Some of the comments made included the following: “They do a great job by giving them technical knowledge, but often they don't get enough exposure to the practical side. They must try to do 6 months on P1, 6 months P2 and another 6 months P3 to be competent on the machines. It is a year and a half exposure”, “I don't see that there is a work environment or practical links between what they learn within a classroom environment versus the real job environment”, “My perception is, they are not fully equiped, they need to gain experience. Once they get into the workshop they gain the skill needed. At FET colleges they only gain the basic knowledge, but it does help them because they have to apply the knowledge” and “They definitely teach them what they need to know, they are not unskilled”.

4.8 Learnerships vs. apprenticeships

Respondents were asked the following question: “Are learnership graduates better prepared for the industry than apprenticeship or NCV graduates?”

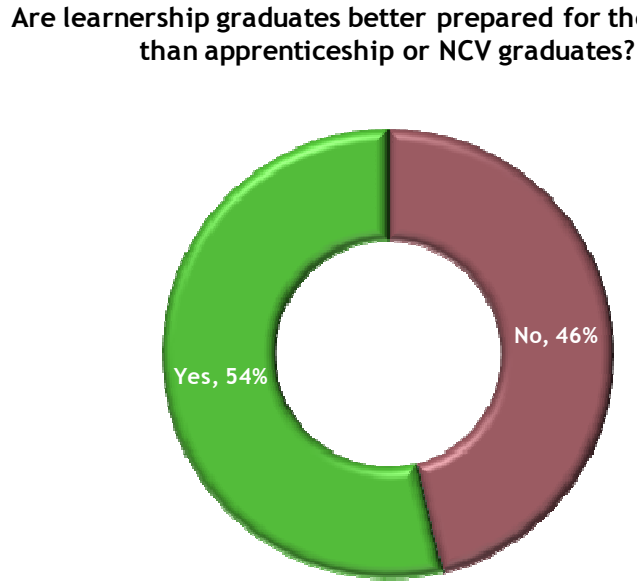


Figure 22: Apprenticeships vs. Learnerships

Respondents were divided on this, as almost both approaches received close to 50%. The following follow up question was also asked so respondents can better understand their

perception on this: “What are your perceptions about the learnership system? How do you see learnerships vs. apprenticeships?”

The learnership and apprenticeship approaches both had strong followers and for very distinctive reasons. Respondents also clearly indicated why they had a preference for one or the other. The positive and negative perceptions of both approaches are discussed below.

3.8.1 Learnerships

Positive aspects of learnerships

Respondents that gave preference to learnerships spoke of customisation, the length of the program and the theoretical component of the learnership. The customisation of the learnership meant that training could be done at a company and that the company would have input into what was being taught. One respondent preferred the short length of the programme, as he believed that the length of an apprenticeship is a risk to a company should it decide to send its employees for training. Finally, a few respondents also indicated that they see the theoretical part as key and that this part provided students with a solid base to work from.

Comments included the following: “I think your learnerships are much better than your apprenticeships, because they get exposed to the theoretical side and the work environment and they get the experience” and “Learnerships for us are easier and shorter, where as apprenticeships are tied up in a 4 year program. If you offer a guy an apprenticeship and he does not step up to the plate you are in quite a situation, where as with learnerships the guy is gone within a year”.

Negative aspects of learnerships

Some of respondents felt that learnerships were limited in what they taught students and that they don’t learn everything that is needed. One respondent also mentioned that the content of the learnership wasn’t relevant to the industry. Some respondents did not really

know a lot about it, which means that people are still uninformed when it comes to learnerships.

Some of the comments made include the following: “The learnership environment is very difficult. According to the guidelines of MerSETA, there isn't something really relevant to our particular industry” and “I think that the learnerships are so complicated and that is why we stay away from it”.

3.8.2 Apprenticeships

Positive aspects of apprenticeships

The hands-on training of apprenticeships were the most mentioned positive aspect. The hands-on training could refer to the technical skills acquired during training. Respondents also mentioned the commitments that have to be made to a company should the company sponsor the apprenticeships of employees. Other aspects mentioned include the practical exposure during the training, the access that students enjoy when it comes to all the working tools in the industry, better training and better knowledge.

Some of the comments include the following: “Apprenticeships are better than learnerships because of the availability of all the tools” and “With an apprenticeship you obviously give them the experience they need. They're learning at the same time, rather than just going to college and doing theory”.

Negative aspects of apprenticeships

The main identified aspect was the shortage of apprenticeships that were available. Respondents were concerned with the amount of apprenticeships available and they believed that programmes needed to be upgraded to counter this. One respondent was also concerned about the quality of training received at the colleges. He spoke of having a 3rd year student at his company for workplace experience and indicated that the student didn’t even know some of the basics.

Some of the comments included the following: “I believe we lack in apprenticeships in this country and as I listen to my colleagues, I believe they feel the same” and “I've had people come here for their apprenticeship and they have no tools. They actually learn more here over a weekend than what they do in a year at their own companies. We had a third year working here for two weeks and he knew nothing”.

4.9 Interventions to be undertaken

Respondents were asked the following two questions:

1. “What kinds of interventions need to be undertaken at the public FET colleges in order to improve the supply of engineering graduates with the skills valued by employers?”
2. “What kind of interventions do you as employer have to make at the public FET colleges in order to improve the quality of engineering graduates with the skills valued by employers?”

3.9.1 Interventions to be undertaken by FET colleges

Various recommendations were mentioned as possible forms of interventions that could be undertaken by FET College. Firstly, respondents indicated that more practical experience is needed, as they felt this wasn’t enough. This practical experience probably referred to the learnership courses offered by FET College. Some of the comments included the following: “They must be more practical and must have the skills”, “They need to do more practical work” and “They must have a practical programme, even if it’s for a company”.

Secondly, respondents indicated that more practical skills were needed. They emphasised the importance of skills and indicated that graduates had to be properly skilled before they could enter the job market. One respondent also mentioned that there was a rapid decline in skilled artisans in the market and that more of them are needed. Some of the comments include the following: “They must be more practical and must have the skills”, “I really think there is a need for more skills. You can't take someone from the street, they must have the knowledge of the industry” and “There aren't a lot of skilled learners out there.

More training is needed from both the employer and the college itself. They have to take on more learners to improve their skills".

Thirdly, respondents requested that facilities needed to be improved. One respondent said that facilities that trained artisans needed to be introduced, whilst another respondent indicated that proper workshops needed to be set up. There was also a respondent that indicated that the current workshops had to be made bigger. Some of the comments included the following: "They need to set up proper technical workshops where they can train the guys. How can you be properly trained after 85 weeks" and "They need to provide facilities with practical artisan type training so that we can get more fitters, turners, welders and boiler makers".

Finally, respondents questioned the quality of the lecturers at FET colleges. A few respondents felt lecturers didn't have the necessary experience needed to tutor students. One of the comments was the following: "I think all the lecturers needs to be technically inclined, needs to understand the subject not only on a theoretical base, but also in terms of qualifications. I would say there is a huge link of the level of competencies of the lecturers at the FET's".

3.9.2 Interventions to be undertaken by employer

Two main themes came out when respondents were asked what they believe employers could do to intervene.

Firstly, they mentioned aspects related to practical training. Some respondents felt that more training could be provided by companies, whilst other indicated that companies should ensure that the quality of training is of a high standard and that students would know the basics when they left the company.

Some of the comments include the following: "To take on more learners for learnerships", "Same thing, practical, practical, practical. Some people learn better when they do it, instead of it being explained the whole time" and "We should spend a lot of time just

teaching them basic business practices. We allow them a lot of time working with our actual instrumentation so that they can get more hands-on understanding of our equipment. We also have to teach them a lot about health and safety".

Secondly, respondents believed that more should be done to develop the link between FET's and companies. A couple of respondents indicated that companies needed to be approached, so that FET Colleges could better understand the needs of the industry. A couple of respondents also indicated that more should be done to improve the relationship between companies and merSETA.

Some of the comments include the following: "I think from our side we would need to maybe sit with someone from merSETA or the FET College and establish what learnerships will be mutually beneficial", "There needs to be a partnership between the FET colleges and the companies. If they approach us we won't be hesitant to help, there just needs to be a partnership with us and merseta" and "Perhaps FET colleges should be engaging more with employers to see what their needs are. They can then ensure that their qualifications are developed and standardised according to that. They should also take into account the level of the qualification, as it can be too low sometimes to meet the needs of the employer. I think there needs to be more of an engagement between FET's and employers across the merSETA chambers or industries".

4.10 Roles to address employer demand in the engineering sector

Respondents were asked the following three questions:

1. "What role can SETA's play in achieving stronger delivery between FET colleges supply and employer demand in the engineering sector?"
2. "What role can the government play in achieving stronger delivery between FET colleges supply and employer demand in the engineering sector?"
3. "What role can FET colleges play in achieving stronger delivery between their supply and employer demand in the engineering sector?"

3.10.1 Roles to be played by SETAs

In general, most aspects revolved around SETAs becoming more actively involved in the whole process. Respondents wanted SETAs to have closer ties and more communication with FET colleges and employers and also get certain tasks done, as they believed this would improve stronger delivery. Some of the tasks (mentioned by individuals) included the following:

- Look into the needs of the industry
- Provide additional funding to colleges
- Incentivise employees for taking on students
- Provide grants (numerous mentions); this will assist in training
- Ensure students study relevant courses through quality control
- Offer more courses
- Take over theoretical training
- Ensure quality of lecturers
- Advertise FET colleges to companies and thus provide more exposure

Some of the comments include the following: “Obviously they need to get more involved in funding and quality control and supplying more grants. But also yes, quality control in terms of what is offered, what comes out of the FET colleges”, “Take over the theoretical training as they did in the old days. These days the company must do theoretical and practical” and “I think that the SETAs should really go out and find out from the employers what their expectations are and they should be the link between the colleges and the employers. For example maybe merSETA should make sure that the learning at the FET colleges is relevant and still applicable within the business and working environment”.

3.10.2 Roles to be played by government

Many respondents indicated that government should provide more funding. They believe that this funding should also include grants and bursaries to students. One respondent indicated that many wanted to study, but that they didn’t have the funds to go and study

at a FET college. This funding should ensure that the level of education is raised throughout the colleges.

Some of the comments included the following: “If you give grants to colleges and you get students placed into companies, there will never be a problem”, “I think they can actually contribute financially through bursaries or bursary schemes to get more students trained in engineering, because we have a shortage of engineers in our country at the moment” and “They shouldn't build a R200 million compound for the president that is outgoing and rather spend the money on education. They could spend more on education. Let's get the textbooks to learners”.

Secondly, respondents felt that the government could do more to improve the quality associated with FET colleges. This included improvement of facilities and workshops, as well as the quality of lecturers. A few respondents indicated that the government should do more to ensure that the lecturers teaching at FET colleges are skilled and that they have experience of the subjects that they are teaching.

Some of the comments include the following: “I think our government should ensure first of all that all the lecturers have the correct credentials. That they have all the resources”, “Qualified teachers. The teachers must be subject matter experts. You can't expect somebody to teach an artisan to be a boiler maker if he's not been a boiler maker himself” and “Upgrade the workshops and training areas. The right tools are vital”.

Finally, respondents indicated that government should do more to understand the needs of the industry. Government could then link up with FET colleges to ensure that students have relevant material when they are being taught. The following comments illustrate this well: “Well obviously I think through the SETA specifically do more research regarding what the industry specifically needs. Through the sector skills plans they should really determine what skills are lacking, what specific occupations need to be filled within the industry. They need to align that with what is being offered within the FET colleges”.

3.10.3 Roles to be played by FET colleges

Two main themes were identified when this question was asked. Firstly, respondents indicated that FET colleges should visit companies and better understand the needs of the companies and identify what is needed in the industry. This would ensure that students acquire relevant skills and that they can be used in the industry upon qualification. Secondly, respondents indicated that FET should focus on improving the overall quality of studying. A couple of respondents indicated that the quality of lecturers had to be higher, as well as improving facilities so that it can assist students and ultimately further improve their skills.

Some of the comments include the following: “Offer decent lecturers and a syllabus that is up to standard with what they can expect in the workplace. The quality of lecturers are very poor”, “I think there should be an exchange program between the FET colleges and business so that the lecturer can also be familiar with what's happening in the business” and “The first thing is to find out what the company needs, what type of skills and fields they want. They need to understand where our needs are mostly and they also need to prepare the student for the working environment”.

5. Heads of Colleges perception of employability in the engineering industry

The analysis and key findings of the Heads of College's perception of employability in the engineering industry is organised as follows:

Firstly, the profile of respondents will be indicated, along with 2 statement questions asked during each interview. Following that, respondents were asked to elaborate on their experience of placing graduates in the engineering industry. They are then asked to explain the nature of the relationship between FET colleges and the HR departments of companies in the engineering industry. Following that, they indicate whether they feel equipped to prepare students for the job market. They then give their perception on the difference in employment prospects between learnerships and apprenticeships. The preparedness of graduates for the job market is then discussed. Respondents then indicate what interventions they believe would improve the quality of their students.

Respondents also indicated whether or not companies were receptive to FET graduates and why they thought so. The skills desired by the industry were then discussed. Respondents were then asked to mention the positive and negative aspects about their own college and graduates. Respondents were also asked to indicate whether or not graduate from other tertiary institutions had any perceived advantages over FET graduates and why. Finally, the respondents indicated what they believed the roles were that SETA's, government and FET colleges could play to meet the employer demand in the engineering sector.

5.1 Respondent profile

Respondents were asked to indicate their gender and cultural group. These results were quantified in charts and are indicated below. In total 26 interviews were done with Heads of Colleges and Engineering departments at the following campuses:

Free State

- D1 & D2

Gauteng

- A1, A2, A3 & A4

KwaZulu-Natal

- C1 & C2

Eastern Cape

- E1

Western Cape

- B1 & B4

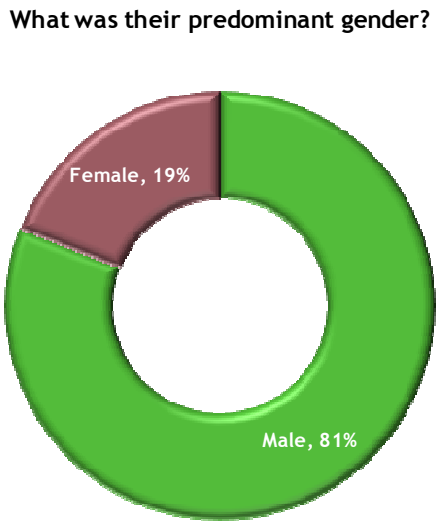


Figure 23: Gender

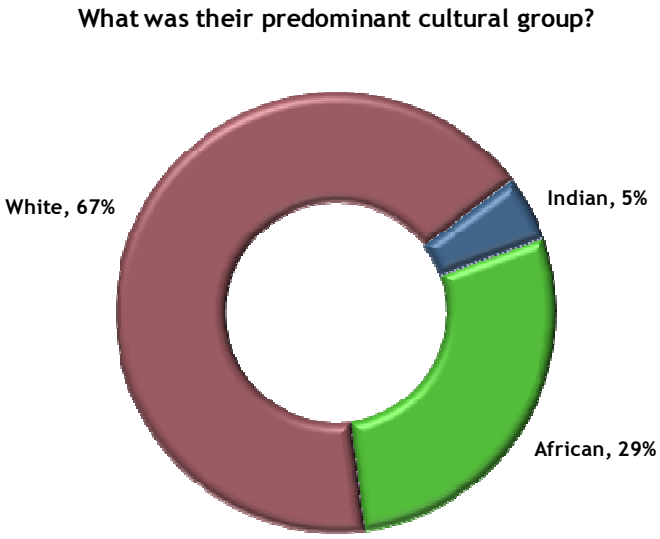


Figure 24: Cultural Group

5.2 Quantitative responses by Heads of College

Heads of Colleges were asked two statement questions that revolved around the security of students in their jobs, as well as the comparison of a FET qualification with those from other tertiary institutions. Please note that the statement and range results should be interpreted with caution due to the small sample size.

On a scale from 0 to 10, where 0 indicates "Not at all" and 10 indicates "Fully", please rate the following statement.	
How secure do you feel graduates will be at their new jobs, based on the education they received from FET college?	62.0

Figure 25: Job security of graduate statement

On a scale from 0 to 10, where 0 indicates "Much worse" and 10 indicates "Much better", please rate the following statement.	
In your opinion, how does the FET engineering qualification compare with that of tertiary institutions?	58.2

Figure 26: FET qualification comparison statement

Respondents indicated that job security would be above average based on the education received (62.0), whilst on average they believe FET qualifications to be slightly better than those of other tertiary institutions (58.2).

The ranges of answers on both of these statements provided the following results:

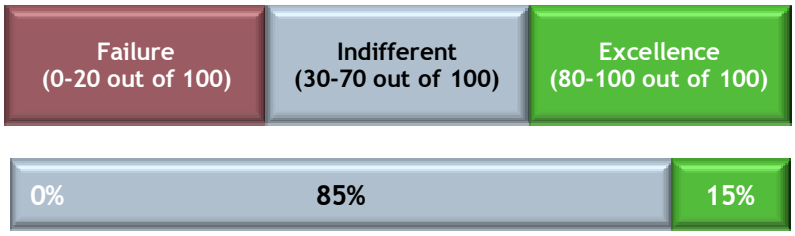


Figure 27: Job security of graduate ranges

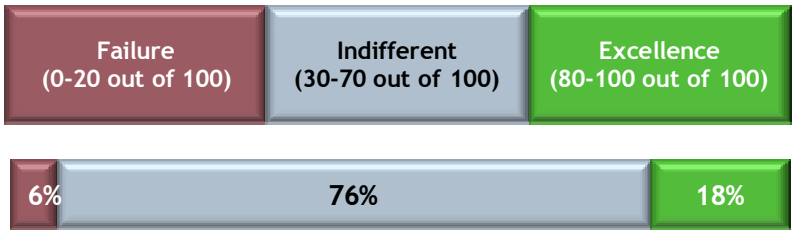


Figure 28: FET qualification comparison ranges

When asked what the predominant gender of their graduates was, respondents indicated that all of them (100%) were male, whilst they also indicated that all of them (100%) were African.

Respondents also indicated that an average of 115 students obtained an engineering qualification from their FET College within the last year.

5.3 Experience with engineering industry when placing graduates

Heads of Colleges were asked the following question: "Tell me a bit about your experience in dealing with the engineering industry in terms of placing graduates?

A couple of respondents indicated that they managed to place their graduates in the engineering industry, but most experienced resistance from companies in terms of placement. These two aspects are discussed below.

4.2.1 Respondents that were able to get their graduates placed

Some form of established relationship was the main reason why respondents managed to find a job or gain work experience upon graduation. These relationships have been in place and have been nurtured over time. A few respondents also indicated that companies have shown more of a preference for graduates that specifically had sufficient practical exposure. There was also mentioned that some companies send their own employees to FET colleges for training.

Some of the comments included the following: "There seems to be more of a demand for graduates with practical experience over those who had theoretical experience", "We have got partnerships with various companies that do take our students, whether it is for either permanent employment or whether it's just workplace experience" and "Placing graduates was part of my job usually the firms come and see me if they want a candidate for a specific job. That includes mines and factories and production jobs like hard core mining".

4.2.2 Respondents that experience resistance in placing graduates

The main reason for resistance from companies was safety aspects related to workplace experience. Graduates could hold companies liable if they were injured while working at the company, as they would only be there in a workplace experience position and not on the payroll of the company. One respondent indicated that this was addressed by the FET College taking out an insurance policy on respondents that were placed for workplace experience.

Another reason for resistance was the misperception of the value of a FET qualification. There was an indication that companies still compare NCV courses to N-courses. One respondent also indicated that companies felt that graduates that want to gain workplace experience could be a bit of a distraction at their company.

Some of the comments included the following: “When placing graduates we found that the industry has got a misconception of the value of NCV and they want to compare NCV with the N courses, where as the N courses has no practical component. When you do the N courses and go to the workplace you will have no practical experience” and “One handicap was whose responsibility it will be if somebody got hurt at the company and they are not on the company's payroll? The college now took out an insurance policy on the students. This will cover both students and lecturers, should they go to the workplace or companies”.

5.4 Relationship between FET colleges and HR departments of companies

Heads of Colleges were asked the following question: “Is there a relationship between the college and HR departments of companies?”

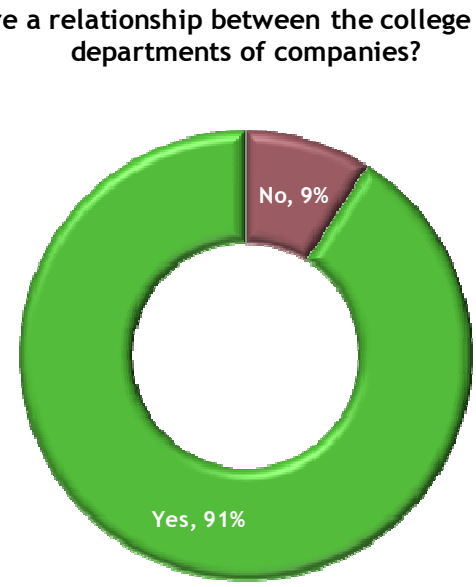


Figure 29: Relationship between FET College and HR departments of companies

91% of them indicated that they did have a relationship with the HR departments of companies. They were then asked to elaborate on this by answering the following question: "Explain the nature of the relationship between the college and HR departments of companies?"

The relationship between FET colleges and HR departments of companies consists of three types of interaction. The placement of FET graduates into companies was the main form of interaction between FET colleges and the HR departments of companies. The second type of interaction was that of companies that came to FET colleges to address students. The final form of interaction involves employees from companies getting training from or at a FET college. These three forms of interaction are discussed in more detail below.

4.4.1 Placement of FET graduates

Respondents indicated that the placement of FET graduates was in most instances a two way relationship between the HR department and specific FET Colleges. Companies would contact a FET college to communicate vacancies they have or the college would contact the HR departments and request them to open their doors for the students, either in a permanent position or on a contract basis. Some respondents also spoke about partnerships

being formed with large companies. These on going partnerships would then form the platform for students to be placed at these companies, either in an employee position, or a contract worker.

Some of the comments include the following: “The relationship is that we have to decide, or the companies' HR approaches the college at this point, to find placement for our students or are looking for students to be placed in the companies, instead of using advertisements in the newspapers. There are quite a few companies around who do this. This is their first stop where they actually come to look for people to appoint” and “They sometimes put up posters for vacancies that's available at companies and so on. By doing that they are informing the students that are finished with their studies where there is employment available”.

4.4.2 Other forms of interaction

One respondent indicated that they invite companies to come to a FET college and address students. This could provide students with valuable insight and assist them going forward. The respondent made the following comment: “We do have companies that often come and address students. They give them a picture of what is happening in the companies and they show them their interest.”

A few respondents mentioned training being done at FET colleges. This training involved employees from a company. The company would contact a FET college to do this and they would either send their employees to the college or the lecturers would go to the company to do the training. Some of the comments included: “In terms of the mines specifically, there is a relationship that we train their employees. We actually go that far that we even train them on the sites of the mine” and “At this present moment at our college we have companies that have sent their students. They send them to workshops like tool making”.

5.5 Do respondents feel equipped to prepare students for the job market?

Heads of Colleges were asked the following question: “Do you feel well equipped to train and prepare FET students for the job market?”

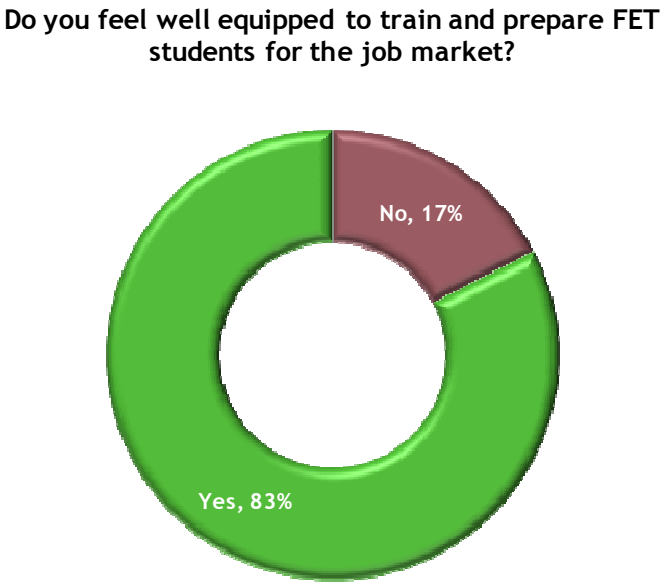


Figure 30: Feeling equipped to train students for the job market

83% of respondents felt that they were equipped to prepare FET students for the job market, which is positive, as this indicates that they have confidence in the tools provided to them by FET colleges. The reason behind positive responses is discussed first and is then followed by negative responses.

4.4.1 Respondents that felt equipped

The main reasons why respondents felt the college was equipped was due to the quality of the programmes, lecturers and too a lesser extent, the facilities.

In terms of the programme, respondents felt that the programmes covered all the necessary details and provided a good practical platform for students. There was one respondent that was concerned about the theoretical side of a course and indicated that this might not be up to standard yet. Another respondent was also concerned about the Nated qualification, as this qualification had no practical side. He felt that graduates were not fully prepared for the job market due to this lack of practical experience.

Some of the comments included the following: “We do have the NCV Programme that is designed to equip them for that market, but we additionally help our students and put them on additional courses like Curriculum Vitae Writing and Interview Skills through the Student Support Services” and “I think that everything we are doing currently in the FET is relevant to the work in a job market or placing students in the industry. When I say relevant the scope is broad enough, it allows a student not to be alienated when they approach a workplace the first time.”

With regards to lecturers, a couple of respondents referred to the experience of lecturers, specifically their own practical skills. They felt that they have the required practical skills and that they have been in the industry for a number of years and therefore they are equipped to teach students. Some of the comments included the following: “The lecturers themselves are well equipped like me. I am a qualified fitter and turner and I've got the necessary experience and know-how to train students” and “At the college we do have lecturers that are artisans, and have got a sound experience in terms of workshops in the relevant trades”.

The quality of the workshops was the most mentioned aspect in terms of the quality facilites. Respondent mentioned aspects such as the accreditation received by merSETA and the fact that workshops were well equipped. Some of the comments included the following: “We have workshops that are accredited by merSETA” and “We do have well equipped workshops where the students do practicals and then they get more practical skills and they are able to use them”.

4.4.2 Respondents that didn’t feel equipped

Only a couple of reasons were provided as indication of why respondents didn’t feel equipped. The quality of the lecturers was the only aspect that received more than one mention. Comments on this aspect included: “We need to uplift the standards of the lecturers so that it must meet the demands” and “I think we need in service training for our lecturers as well because many of the lecturers are more theory based and it's been a long time since they have been in industry”.

5.6 Difference in employment prospects between learnerships and apprenticeships

Heads of Colleges were asked the following question: "Is there a difference in employment prospects of those in learnerships and those in apprenticeship routes to artisan training?"

Figure 31: Employment prospects

85% of them felt that there was a difference between the employment prospects of learnerships and those of apprenticeships. Almost all of those that felt there was a difference indicated that those who did an apprenticeship had a clear advantage over those who did learnerships. The main two reasons provided for this is the preference of companies for the traditional route, as well the skillset acquired when doing an apprenticeship. These two aspects are discussed below.

4.5.1 Preference for the traditional route

A companies' preference for the traditional route was by far the most mentioned aspect. Respondents mentioned that in general companies were just more inclined to appoint those

in apprenticeships. They believe that companies are familiar with what apprentices offer them and that some are still resistant to learnerships, as the learnership route is a new concept and that they aren't too familiar with it.

Some of the comments included: "Learnership is sort of a new concept. They are all used to the apprenticeship programme and it works better with the industry" and "With the apprenticeship they are normally absorbed in the companies, but students who completed their learnership have a problem as they are not absorbed".

4.5.2 Skillset acquired when doing an apprenticeship

A few respondents indicated that companies prefer apprenticeships, as they would provide them with graduates that have a broader understanding of the industry. They mentioned that those in learnerships only learned specific skills and would therefore find it more difficult to get employment.

Some of the comments included the following: "This difference will be that your learnerships concentrate on specific tasks, where your artisans have a broader understanding of the work that they will do" and "To be honest with you, I was somewhat sceptical about the learnership issue because they would teach certain aspects of a trade and a person would get some kind of certification to say I am now competent to do this, but that wouldn't qualify him for the comprehensive trade".

5.7 How prepared are graduates when they enter the job market?

Heads of Colleges were asked the following two questions:

1. "In your experience, are FET College graduates in learnerships adequately prepared for the job market?"

2. “In your experience, are FET College graduates in apprenticeships adequately prepared for the job market?”

When comparing the results of these two questions, it can be concluded that respondents believe that apprenticeship graduates are better prepared than learnership graduates, as is indicated in the 40% difference in scores.

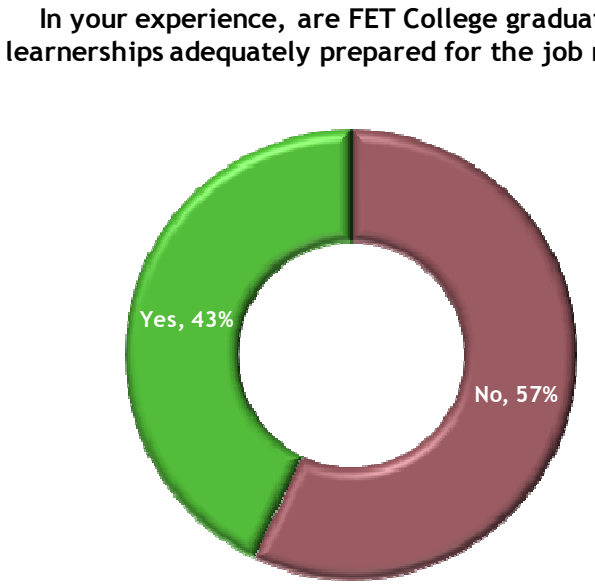


Figure 32: Adequate preparation of FET learnership graduates

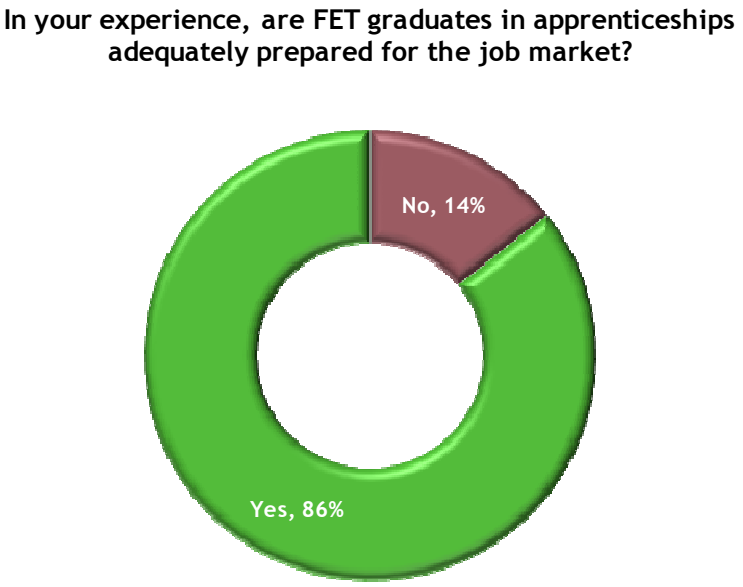


Figure 33: Adequate preparation of FET apprenticeship graduates

Feedback on learnerships is summarized first and then followed by feedback provided on apprenticeships. The difference between the two is then investigated to better understand the large difference in scores.

4.6.1 Learnership feedback

Respondents who think that learnership graduates aren't prepared

A lack of practical exposure is the main reason why respondents believe learnership graduates aren't properly prepared for the industry. They believe that this lack of experience puts them at a disadvantage to apprenticeship graduates, as companies prefer graduates who already have some kind of understanding of the workplace environment. It was also mentioned that learnership graduates were fast tracked and not necessarily ready for the job market. Another aspect that was mentioned was the skillset acquired by learnership graduates. One respondent mentioned that these skills weren't necessarily relevant to those needed in the industry.

Some of the comments included the following: “They have acquired the skills but the skills are not that much in line with the requirements of the industry”, “They didn't receive or were exposed to the practical field, they only did the theory” and “They need more practical experience in order to be ready for the job market”.

Respondents who think that learnership graduates are prepared

The simulation of the work environment is the main reason why respondents feel learnership graduates are better prepared for the job market. They believe that respondents are limited to the practical exposure offered by a specific company; where as learnership at a college covers more skills. Some of the comments include the following: “He is not just exposed to the training available to the company, but he is exposed to the full experience of his trade, which makes it much broader than an apprenticeship” and “A lot of things that are simulated are very close to the real work environment”.

4.6.2 Apprenticeship feedback

The combination of theoretical knowledge and a proper practical experience is seen as the main reason why respondents feel apprenticeship graduates are properly prepared for the industry. They believe the theoretical side to be necessary, but they place an even higher emphasis on the practical exposure. The on-the-job training provides them with skills that are relevant to the industry.

Some of the comments include the following: “The programme has been designed to assist the student with practical and also theoretical information. We place our students in the industry during holidays to actually gain experience in the workplace and we are really successful with that” and “We give them training that meets the needs of industry”.

4.6.3 Why the difference in scores?

The main noticeable difference in perception is that of practical exposure. Respondents believed that apprenticeship graduates were far better prepared and the main reason for this is sufficient practical experience that graduates obtain through their placements with companies. They believe that this experience has more benefits than simulated work experiences provided by the learnerships.

5.8 FET interventions to improve the quality of the students

Heads of Colleges were asked the following question: "What kind of interventions do you as FET colleges have to make in order to improve the quality of engineering graduates with the skills valued by employers?"

A lot of small aspects were mentioned by respondents, rather than one major aspect. These aspects covered the whole spectrum of possible interventions that can be done. These aspects are discussed below in no particular order.

Quality of training

Respondents indicated that the quality of training, specifically some of the competencies of the lecturers and the functionality of workshops, need to be addressed. They felt that FET colleges should ensure that lecturers have the relevant skills and that they effectively transfer these skills to students. With regards to workshops, they felt that these need to be upskilled and that they shouldn't be too overcrowded with students. Some of the comments included the following: "The problem is usually you have too many students or a group at the workshop" and "I think lecturers need to be more knowledgeable, in terms of applying the skills to students, for the students to prosper and do better".

Type of student

A couple of respondents indicated that FET colleges were attracting the wrong type of student. One respondent specifically referred to students who enroll and were told by their schools that they were good with their hands and then fail to make it at a FET college, as they struggle with the theoretical component of the work.

The respondent made this verbatim comment: "The main challenge we have is the type of students that are drawn by FET colleges which is not really the required type of student. Schools tell their students that you must go to a college as you are good with your hands. Our work is pitched at a much higher level than the normal grade 10, 11 and 12. That's why

we have such a high dropout figure. I've got a program that I've got to offer them and the main assessment at the end of the day is a theoretical assessment, which they struggle with".

Company needs

A couple of respondents indicated that FET colleges should assess the needs of local companies and communicate it to students. Students can then better understand the needs of companies and be prepared when they find a job. Some of the comments included the following: "We work in accordance with the employers and they try to fulfil their needs. We also take the students to employers so that the students can see what is needed from them from an employer" and "We try to form relationships with industries so that we will be able to place our learners and be able to know what is updated in terms of equipment and new trends".

Practical training / experience

Finally, a couple of respondents indicated that students should be given more practical exposure and / or training. This aspect has also been mentioned in other parts of the word report and is definitely something that FET College could look into. This practical exposure and training will help to prepare students for the workplace upon graduation. Some of the comments included the following: "I think we should focus more on our practical training because the employers must know he can at least do some work with his hands" and "We need more workplace exposure for our students. We need our staff to gain workplace exposure. If the industry can open up to our staff, it will help us to better understand the new technologies that are out there in the market".

5.9 Receptiveness of employers to FET graduates

Heads of Colleges were asked the following question: "How receptive are employers to FET graduates in your experience?"

Most of the respondents felt that employers weren't responsive to FET graduates. The main reasons for not being receptive were the perception of employers towards the NCV programme. Another aspect that received a few mentions was the influence of the media. However, there were some respondents that felt that employers were receptive towards FET graduates. They believed that established partnerships were responsible for this. These 3 aspects are discussed in more detail below.

Perception of the NCV programme

Respondents felt that employers still had a wrong perception of the NCV programme. They were resistant to graduates as they still didn't fully understand what the NCV programme was about. They felt that the industry wasn't really informed about the NCV programme and what exactly it entails. They also indicated that employers still showed a preference to the native programmes. Some of the comments included the following: "The industry is not very informed about the NCV program" and "They give us resistance because they do not understand what we are actually doing".

Influence of the media

A couple of respondents indicated that the media had created a negative perception of FET colleges. This negative perception would then reach the ears of companies and influence the way they think about FET colleges. One of the respondents made the following comment: "I think it is because of the stigma that is attached to FET's from the media's point of view".

Established partnerships with companies

The main reason for a positive receptiveness towards FET graduates was the established partnerships companies had with the FET colleges. They indicated that large companies have established partnerships with FET colleges and through these partnerships, students gain experience in their workshops. In some cases these partnerships were extended through the hiring of the best performing graduates.

Some of the comments included the following: “In general I would say they are rather receptive. They take in a lot of guys who were on an N-course” and “They approach us and look for apprenticeship or learnership students. We normally identify them and then we work together with the HR Office of that company”.

5.10 Skills desired by the industry

Heads of Colleges were asked the following question: “What skills does the engineering market typically look for in graduates when recruiting?”

A lot of specific skills were mentioned by respondents and can broadly be assigned to the following 2 groups, which are unpacked below:

a) Skills acquired through a tertiary institution
b) Aptitude of the individual

4.9.1 Skills acquired through a tertiary institution

Practical skills and workplace experience, as well as a sufficient theoretical knowledge were seen as being key to the skills desired by the industry. These skills should be relevant to the industry and should meet the needs of the company that wishes to employ one of the graduates. These practical skills should be technical in nature and allow them to operate machines and workshop equipment.

Some of the comments include the following: “Students should be able to operate machines and they should have the background knowledge”, “They should know the basics of the trade they are looking to work in”, “First of all the practical part of their training, skills, and the knowledge of especially safety is one of the most important parts of their training” and “They will look if the students are able to work with tools”.

4.9.2 Aptitude of the individual

A lot of the skills also revolved around the aptitude of the individual. These skills can't be learned and has more to do with the way the individual approaches life. Respondents believed that each company looked for specific skills as this would be a good indicator of whether or not the graduate would fit into the company. These were some of the skills that were mentioned:

- Attitude
- Willingness to be trained
- Punctuality / Being on time
- Committed
- Disciplined
- Communication skills
- Attendance / Coming to work on a daily basis
- The ability to think for themselves

Some of the comments relating to the above mentioned aspects include the following: "It is about your attitude. Attitude is a very important thing. Even though a learner is skilled in what he is trained to do, the decisive factor would be his attitude", "Knowledge, attitude and skills. Those are the three areas that they focus on" and "I think the normal work skills like punctuality, you know, to be there every day and things like that, but then also the ability to be trained".

5.11 Positive & negative aspects of FET colleges / graduates

Heads of Colleges were asked the following two questions:

1. "Please mention the 3 most positive aspects about FET colleges / graduates?"
2. "Please mention the 3 most negative aspects about FET colleges / graduates?"

Two clear themes came through in each of these questions. Those were aspects related to FET colleges and aspects related to the graduates. The two themes identified in both questions are discussed below.

4.10.1 Positive aspects

Positive FET College related aspects

Most of the comments made related to the quality of the qualifications at the colleges. Some respondents mentioned that the qualifications gave students a good practical foundation, as they are trained to enter the market and given practical exposure at a company. The good theoretical knowledge obtained before entering the market was also mentioned. One respondent also mentioned that students were exposed to the realities of the industry.

Some of the comments made included the following: “I think the fact that they had the opportunity to have practical training is a positive”, “The training they receive sufficiently prepares them for the workplace” and “I think they are trained for the market and they do have practical exposure within the industry in the working environment during the holidays”.

Positive graduate related aspects

As was the case in 4.9.2., a diverse set of skills relating to the aptitude of the student were mentioned by the respondents. One positive aspect that was regularly mentioned was the discipline transferred to students by the lecturers. One respondent specifically mentioned that discipline sufficiently prepares graduates for the job market. Most of the remaining aspects indicated below relate more to the personality of students who join the college. Some of the other graduate related aspects that were mentioned included the following:

- Attitude

- Attendance
- Competency
- Willingness to learn
- Teachable
- Effort

Some of the comments made including the following: “I think these students spend a lot of time and effort in studying this qualification”, “The discipline the college teaches them in preparation of the job market is one of the reasons. The other thing that we install is attendance, which will be a positive attribute to the job market” and “FET graduates are eager to learn and willing to grab the opportunities as they come”.

4.10.2 Negative aspects

Negative FET College related aspects

The perception towards FET colleges was the most negatively mentioned aspect. Respondents indicated that people see FET College as being inferior to other tertiary institutions, specifically universities. One respondent specifically mentioned that people see the FET College as a drop off point for drop out students. Other aspects mentioned were the difficulty of the qualifications at FET College and the type of students that were attracted to the college. One respondent indicated that school learners with marks lower than 50% came to the FET College and this didn’t reflect positively on the college. These students would also only then need to achieve a certain mark to pass their exams. A few respondents felt that this was too easy and this in turn made it difficult to market students to companies.

Some of the comments made included the following: “I think it is the perception that we are a place, a drop off point, for drop outs” (made by a white female), “How the colleges are being put into the community by media. The pass percentage has been dropped so far that it becomes difficult to take our students to companies. In other words, focus on the passing rate” and “I think the negative is the perception of some people or companies towards colleges. It is an old perspective where they think we don’t do proper training”.

Negative graduate related aspects

The main aspects mentioned by the respondents were the attendance of students, as well as the difficulty they experienced in maths. One respondent indicated that low attendance could be the result of low attendance during school years. Students weren't used to attending school on a regular basis during school years and this pattern was continued at FET colleges. A few respondents indicated that students performed badly in maths at school level and were struggling with the maths at FET College, as it was a step up. Another aspect mentioned was the attitude of students. One respondent indicated that student want others to do everything for them, while another indicated that students weren't interested in learning for exams.

Some of the comments include the following: "They struggle to get the mathematical skills", "They tend to be not good in their attendance. Some of them do have a problem with that" and "Some of them are reluctant to do work because they usually really want other people to do everything for them".

5.12 Perceived advantages of graduates from other institutions

Heads of Colleges were asked the following question: "Do you feel graduates from other institutions, such as universities, have any advantages above FET college graduates?"

Respondents were more inclined to think that graduates from other institutions didn't have a perceived advantage over FET College graduates. The "Yes" and "No" responses to this questions was captured and quanitified in the chart below. 67% of respondents answered "No" to the question before elaborating on their answer. The reason behind their answers is discussed below.

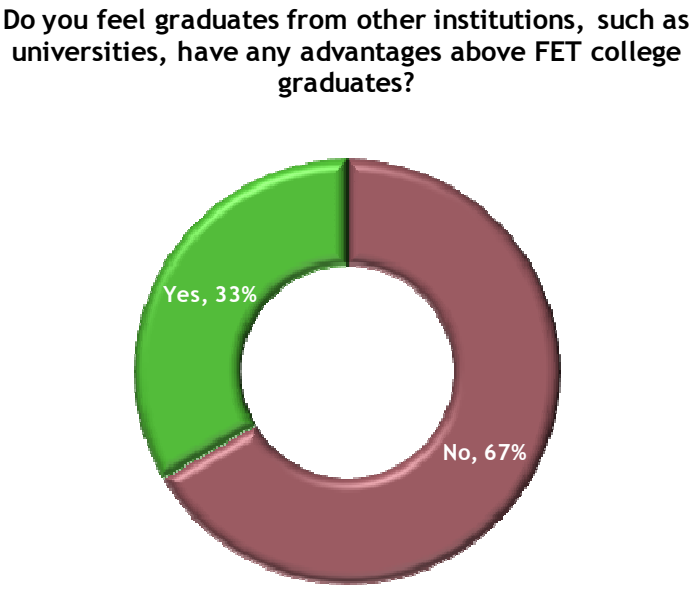


Figure 34: Perceived advantages of students from other institutions

4.11.1 Graduates that are perceived to have advantages ("Yes" answers)

The perceived importance of an university qualification is seen as the main reason why other graduates have an advantage over FET graduates. A couple of respondents believed that companies would be more interested in employing university graduates, whilst another respondent indicated that it is easier to market university graduates. One respondent also indicated that the public was still uninformed about the function of FET colleges. Some of the comments include the following: "Their qualification is pitched at a better level" and "That is till due to the fact that industries are not very much aware of what is happening in the FET colleges".

4.11.2 Graduates that are perceived to have no advantages ("No" answers)

The practical exposure of FET students is the main reason why some respondents believed there was no advantages between graduates from tertiary institutions. One respondent indicated that university students lacked in practical exposure, which is core to qualifications obtained at FET colleges. Respondents also mentioned the training obtained at a FET college. They believed that this training is superior to that offered by an university. Some of the comments include the following: "I think graduates from universities lack the

practical component of the industry, specifically practical skills that are gained for the NCV's", "We give students the practical experience that is needed by companies" and "We offer more practicals than universities".

5.13 Meeting employer demand in the engineering sector

Heads of Colleges were asked the following three questions:

1. "What role can SETA's play to ensure that FET colleges meet the employer demand in the engineering sector?
2. "What role can the government play to ensure that FET colleges meet the employer demand in the engineering sector?
3. "What role can FET colleges play to ensure that they meet the employer demand in the engineering sector?

The role to be played by each of the three entities is individually discussed below.

4.12.1 Role to be played by SETA's

Partnerships and assistance are the two main roles that SETA's can play, according to respondents. Respondents indicated various functions that could be fulfilled through either a partnership with SETA's or through assistance provided by SETA's. Partnerships and assistance were closely linked together and had identified functions that overlapped. Some of the functions identified in partnerships and assistance include the following:

- Accreditation
- Funding / Grants / Donations
- Better equipment
- Workshop input
- Infrastructure development and renovations
- Workplace experience for students

- Assistance in course development
- Workshops upgrades
- Help FET college meet the standards of the industry
- Bring FET college and the industry closer together
- Identify skills that are needed in the industry
- Feedback on job availability in the market

Comments on these functions include the following: “One of the things that the SETA's can assist with is to give feedback on what type of work or jobs are available”, “I think they need to work closer with FET colleges as partners. I think they can also give more guidance and input to the colleges, especially in terms of their workshops”, “We need exposure to partners, grants, and then we need equipment, latest innovations, donations and companies coming in and out through SETA support” and “They should become more involved in programme development”.

4.12.2 Role to be played by government

A lot of respondents acknowledged the role currently played by government and indicated that government is doing what it can. However, there were some suggestions made a couple of respondents. Firstly, it was mentioned that government should bring SETA’s, colleges, universities and other higher education facilities closer to each other. This improved relationship will help them work together closely and ultimately improve the training of people for workplace. There were also requests for some additional funding to FET colleges as this would specifically improve the technology that is available to students. Exposure to newer technologies would help students to learn more and that would result in students being able to offer more to companies. Finally, there were a few requests to change legislation. The legislation should be focussed on skills development and lead to better equipped students. There was also a request that the pass mark should be increased as this would also result in higher quality graduates.

Some of the comments include the following: “I think what they currently need to do is to bring together the FET colleges, the higher education, the SETA's, into one band, the Higher

Education Band. That would actually cause all the role players to work closer with an output to actually train people for the workplace", "Funding, so that we can buy the latest technology, to ensure that the students have more access to technology so that they can learn more and offer more to the companies", "I think at this stage the government is really coming to the party. For me they are trying to meet industries's needs, but you can see there is clearly a gap still with in terms of what industry requires and what we produce at this stage" and "The government must make the standards higher. Then the most companies will take guys on. Make the passing mark a little higher than now".

4.12.3 Role to be played by FET colleges

The two main themes communicated by respondents were those related to the quality of training and those related to interaction with the industry.

Quality training

Respondents felt that more could be done to improve what was offered to students. One aspect that was mentioned a couple of times was the competency of the lecturer. Respondents indicated that lecturers should be knowledgeable and be comfortable with technology. One respondent also mentioned that programmes should be developed in conjuction with the industry as students would be prepared to meet the needs of the industry. Another respondent suggested that workshops should be smaller, as students don't benefit from too large workshops.

Some of the comments include the following: "We need to ensure that lecturers are knowledgeable", "We need to develop programmes in conjunction with the industry" and "To focus more on practical. Make the class groups smaller, because the class groups are too big. Sometimes there are 30 students in a workshop and that isn't good for students".

Interaction with the industry

More communication needs to take place with the industry. This communication should specifically focus on the needs of the industry, so that FET colleges can align the training of their students with these needs. Lecturers should also be trained in these needs, as they need to transfer the skills to the students. Some of the comments include the following: "Actively get to know the needs of the industry in the relevant areas and ensure that the quality of education and training at the college actually meets the quality standards of the relevant industries in the area", "I think they need to play a big role in communicating with the companies around them. They need to look at and identify the needs of the employers in their specific area and then basically concentrate and train students for the industry" and "They must liaise with the companies of the industry to find out what their needs are".

6. Conclusion and Recommendations

Students' conclusions

Students in general have struggled to get jobs upon graduation. This should be the main concern of FET College, as ultimately students go and study to improve their chances of getting a suitable job. A lot of students weren't very positive about their future in the industry, but despite this, they were still inclined to recommend FET College to their friends, family and colleagues.

Students were thankful for the skills they were taught and believed that these skills were valuable going forward. They were especially thankful for the practical skills and experience they obtained whilst studying at FET College. They also acknowledged the role played by lecturers (capabilities), as well as the theory component of the work. They believed that all of this would give them a solid foundation going ahead. There were some students that felt that there was a lack of practical experience and that too much emphasis was being placed on the theoretical component of the work.

87% of them felt that they were sufficiently equipped for the job market, mostly due to the practical exposure and applicable skills being taught. Their main recommendations to FET

College would be to further assist them in getting jobs, as well as expose them to even more practical experience.

Employers' conclusions

There were a lot of employers who indicated that they didn't have any kind of relationship with FET College. Those who did have a relationship had a relationship due to their own employees studying there, their recruitment of FET graduates or FET students gaining practical experience at their companies. On average, companies employed 15 employees in the last year, but of those, only one on average came from FET College.

The most important criteria they looked for in employees were skills, attitude, experience, knowledge and some personality attributes. They desired graduates that had relevant skills and had the right aptitude for the job. Most of these companies also adhered to Employment Equity. According to them, the most positive aspects of FET graduates were their knowledge, willingness to learn and their enthusiasm, whilst the most negative aspect was a lack of practical experience.

Employers thought higher of university graduates and felt that there degrees were of a higher standard. Respondents were divided on apprenticeships and learnerships and believed that both of these had positive and negative qualities. They felt that FET Colleges should provide more practical exposure to their students, provide them with more practical skills and improve their facilities. There were also a couple of respondents that questioned the quality of the lecturers and suggested that this be improved. Companies felt that they should provide more training and do more to develop a link between them and FET College.

Finally they felt that SETA's should better understand the needs of the industry, provide more funding to FET College and incentivize companies that gave students practical exposure. According to them, the government should provide more funding to FET College and do more to improve the overall quality of FET College. They also felt that FET College should better understand the needs of the industry and do more to improve their overall quality.

Heads of College conclusions

In general, Heads of Colleges were a lot more positive about FET College. They felt that the relationship between them and companies was the key to graduates getting job placements. Their view on the relationship between them and companies was almost identical to the way companies saw it, with the exception that they believed companies also visited them to connect with students.

In most cases, they felt equipped to train students for the job market. The reasons they felt equipped was the quality of programmes, the lecturer and the facilities. There were some respondents that felt that lecturers still lacked some quality and that this needed to be addressed.

85% of them felt that apprenticeship graduates had a clear advantage over learnership graduates when entering the market. The main reasons they felt this way is that they believed companies still preferred the traditional route of studying and that apprenticeship graduates obtained more relevant skills. 43% of them felt learnership graduates were prepared, whilst 86% felt apprenticeship graduates were prepared.

They felt that FET College should focus on the quality of training, as well as the type of students they take in to improve the quality of graduates. They also felt they needed to better understand the needs of the industry and provide more practical experience to their learners. They felt that companies weren't as receptive to FET graduates and that this was due to a misconception of the NCV programme and the influence of the media.

They felt that there were both positive and negative aspects when it came to the college and the students, but still felt that other tertiary graduates didn't have any advantages over FET graduates.

Finally, they felt that SETA's should assist them in addressing employer demands by looking at funding, the quality of facilities and better understanding the industry. Government

could do more by bringing all higher education institutes closer and by providing more funding and bursaries. They also felt that FET College could improve the quality of their training and better understand the industry's needs.

Recommendations

A couple of central themes consistently show themselves throughout the study, irrespective of the measurement, but for the intention of importance, these will be restated in the separate recommendations of each group.

Students'Recommendations

The most important focus point for FET College should be assistance provided to students in getting jobs after they have graduated from FET College. Ultimately, these students attend FET College to obtain skills that enhances their job prospects. This can be done through improved links between FET College and the applicable surrounding work environment. This aspect also opens the door for the involvement of MerSETA, as MerSETA would provide invaluable assistance in this process, thanks to the link that MerSETA has with both role players (FET College and relevant industries).

From a student's perspective there are still a lot of positive aspects around FET College. Students spoke positively about the practical skills transfer, as well as the role played by lecturers (capabilities). In terms of continuing student satisfaction, this can be seen as being very important; FET Colleges around South Africa should therefore be encouraged to investigate the existence of this within their own specific college. The capabilities of the lecturer are especially important and the alignment of their approach is something that could warrant further investigation by MerSETA.

Summary of Student's recommendations:

1) Provide better link between students and surrounding work environment. MerSETA has a role to play in this.

2) Focus should be on the transfer of practical skills, as well as the role played by lecturers. Investigate the alignment of the lecturer's approach with specific reference to their capabilities.

Employers'Recommendations

Two aspects are clearly identified as areas that need critical focus. Firstly, there seems to be a disconnect between the skills of FET College graduates that enter the market and the skills desired by companies in the relevant industries. It is imperative that the current skills transfer is aligned with the desired skills transfer. This will be made possible through discussions between companies and the relevant role players that decide the course content at FET College. Content revision then needs to take place so that this can be aligned with the desired skills and therefore enhance the job prospects of FET College graduates.

The second step involves the communication of the changed content, as well as the existence of FET College graduates, to the relevant industries, as it seems that there are misconceptions and a lack of knowledge about FET College graduates and their capabilities. This communication can be undertaken alongside FET College by the higher role players, such as MerSETA and the government, through the use of their appropriate communication channels. This will ensure a gradual change in the perception of the relevant employers across South Africa and assist in the employment prospects of FET College graduates in the long run.

Summary of Employers's recommendations:

1) Revision of current skills transfer at FET College. The skills should be aligned with the desired skills in the relevant industry. A better understanding of the desired skills can be obtained through discussions with companies in the relevant industries. MerSETA can play a key role in the implementation of this through the facilitation of these discussions.

2) Communication of the changed content and existence of FET College graduates to relevant industries to negate misconceptions and a lack of knowledge by companies in these industries.

Heads of College Recommendations

The concept of quality is something that was mentioned on numerous occassions by Heads of Colleges. The most regularly mentioned aspect around this was the quality of training. Further discussions should be held with key role players to identify what the needs around this is and whether these needs can be implemented. Mentions were made of the lecturers, as well as the facilities and could be potential areas of investigation.

There is also an acknowledgement by Heads of Colleges of the disconnect between the current skills offered by FET College and those desired by the relevant industries. This aspect was mentioned across two different groups (Heads of Colleges and Employers) and can therefore be seen as being important enough to warrant investigation and implementation.

Summary of Heads of College recommendations:

1) Investigation of quality as perceived by Heads of College and possible implementation of findings.
2) Alignment of current skills offered by FET College with those desired by the relevant industries. MerSETA could provide a key role in the successful implementation of this.

Appendix A – Graduates Questionnaire

merSETA Employability Study (Graduates)

Introduction:

Dear respondent, **merSETA** is in the process of investigating the level employability of FET College graduates in the engineering sector. In essence, the research aims to uncover the underlying factors that influence the degree to which FET college graduates are employed into the market. As part of this research it is important for us to understand how FET college students experience this unique dynamic. During this discussion we would like to find out what your perceptions and opinions are. All information shared during this interview will be treated confidentially and will be used for no other purpose than research. The interview / discussion will only take approximately **15** minutes to complete.

SECTION A – MEASURING EMPLOYABILITY

1.	Are you currently employed in the engineering industry?	Yes	No
2.	Are you generally happy with the skills you were taught at FET college?	Yes	No

2.2 Please give reasons for your answer?

_____

_____

3.	Do you feel that the course offered at FET college level gave you enough practical / industry exposure?	Yes	No

3.1 Please give reasons for your answer?

_____

_____

4. Please mention the aspects you believe were lacking in the course you did at FET?

_____

_____

_____

5. Did you feel well equipped for the job market after college?

Yes	No

5.2 Please give reasons for your answer?

_____

_____

6. Do you feel well equipped for the job you currently hold? (If applicable)

Yes	No

6.2 Please give reasons for your answer?

_____

_____

7. Tell us about your experience in hunting for jobs after you graduated.

_____

_____

8. On a scale from 0 to 10, **where 0 indicates "Not likely at all"** and **10 indicates "Extremely likely"**, please rate the following statement. You can also choose any number in between or "Don't know", depending on your evaluation.

		Not likely at all						**Extremely likely**					**Don't Know**
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
8.1	How likely are you to recommend **FET colleges** to friends and family interested in a career in	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**

	engineering?												

9. Do you feel that the college gives students enough guidance and access to job opportunities after they have graduated?

Yes	No

10. What would be your recommendations on how FET colleges can better prepare graduates for the industry?

_____

_____

11. Is there anything we haven't touched on during our discussion which you would like to mention / discuss?

_____

_____

SECTION B – PROFILE OF GRADUATE

1. Gender (do not ask)	
a)	Male
b)	Female

2. Please indicate your age	
a)	22
b)	23
c)	24
d)	25
e)	Older than 25

3. Please indicate your cultural group

a)	Black
b)	White
c)	Indian
d)	Coloured
e)	Asian
f)	Other

4. Please indicate the income bracket you fall in?	
a)	Less than R5000
b)	R5001 - R10000
c)	R10001 – R15000
d)	R15001 – R20000
e)	More than R20000
f)	I'm unemployed
g)	Refuse to disclose

Thank you for your valuable inputs!

Appendix B – Employers Questionnaire

merSETA Employability Study (Employers)

Introduction:

Dear respondent, **merSETA** is in the process of investigating the level of employability of FET College graduates in the engineering sector. In essence, the research aims to uncover the underlying factors that influence the degree to which FET college graduates are employed into the market. As part of this research it is important for us to understand how potential industry employers experience this unique dynamic. During this discussion we would like to find out what your perceptions and opinions are. All information shared during

this interview will be treated confidentially and will be used for no other purpose than research. The interview / discussion will take approximately **60** minutes to complete.

SECTION A – PROFILE OF YOUR COMPANY

We would like to start of by asking you a couple of questions that will help us better understand the profile of your company. Please answer the following questions:

5. What chamber do you belong to?	
a)	Metal
b)	Motor
c)	Plastics
d)	New tyre
e)	Auto

6. Please indicate your staff compliment?	
a)	1-20 staff members
b)	21 – 50 staff members
c)	51 – 100 staff members
d)	101 – 200 staff members
e)	More than 200 staff members

SECTION B – MEASURING EMPLOYABILITY

3. What is your relationship with FET colleges?

4. Have you hired FET college graduates in the recent past? Please elaborate why / why not.

Yes	No

5. How many employees have you employed in the last year?

6. How many of those were from FET colleges?

7. What criteria are you using to screen and select graduates for employment?

8. When screening for new candidates, what skills and attitudes do you look for in graduates (How would you describe the ideal graduate in terms of skills, knowledge, competencies?)

9. Based on your perception of FET graduates specifically - please mention the 3 most positive aspects about FET colleges / graduates?

-
-
-

10. Please also mention the 3 most negative aspects / biggest shortfalls about FET colleges / graduates?

-
-

-

11. How would you describe FET graduates in terms of attributes / traits / qualifications / skills vs. graduates from other tertiary institutions?

12. How do employers from engineering enterprises regard the work undertaken by colleges in preparing students for employment? (your perception vs field)?

13. What are the required equity dimensions of employability in this industry? Are there any? (i.e race, gender, class, age, disability profiles? What is a typical profile of students you employ?)

14. What are your perceptions about the learnership system? How do you see learnerships vs. apprenticeships?

15. Are learnership graduates better prepared for the industry than apprenticeship or NCV graduates?

Yes	No

16. What kinds of interventions need to be undertaken at the public FET colleges in order to improve the supply of engineering graduates with the skills valued by employers?

17. What kind of interventions do you as employer have to make at the public FET colleges in order to improve the quality of engineering graduates with the skills valued by employers?

_____

_____

18. What role can SETA's play in achieving stronger delivery between FET colleges supply and employer demand in the engineering sector?

_____

_____

19. What role can the government play in achieving stronger delivery between FET colleges supply and employer demand in the engineering sector?

_____

_____

20. What role can FET colleges play in achieving stronger delivery between their supply and employer demand in the engineering sector?

_____

_____

SECTION C – ADDITIONAL QUESTIONS

21. I am now going to ask you a series of statement questions regarding the graduates of FET colleges and other tertiary institutions.

On a scale from -5 to +5, **where -5 indicates "Much worse than expected"** and **+5 indicates "Much better than expected"**, please rate the following statements. You can also choose any number in between or "Don't know", depending on your evaluation.

		Much worse than expected					As expected	Much better than expected					Don't Know
		-5	-4	-3	-2	-1	0	1	2	3	4	5	DK
21.1	Please rate the overall	-5	-4	-3	-2	-1	0	1	2	3	4	5	DK

	competency of FET graduates you come in contact with												
21.2	Please rate the overall competency of other graduates you come in contact with	**-5**	**-4**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5**	**DK**

22. On a scale from 0 to 10, **where 0 indicates "Not likely at all"** and **10 indicates "Extremely likely"**, please rate the following statements. You can also choose any number in between or "Don't know", depending on your evaluation.

		Not likely at all									**Extremely likely**		**Don't Know**
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
22.1	How likely are you to recommend **graduates from FET colleges** to other companies?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
22.2	How likely are you to recommend **graduates from other tertiary institutions** to other companies?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
22.3	How likely are you to employ **graduates from FET colleges** in the next 12 months?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
22.4	How likely are you to employ **graduates from other tertiary institutions** in the next 12 months?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**

23. Is there anything we haven't touched on during our discussion which you would like to mention / discuss?

_____

_____

Thank you for your valuable inputs!

Appendix C – Heads of Colleges Questionnaire

merSETA Employability Study (Colleges)

Introduction:

Dear respondent, **merSETA** is in the process of investigating the level employability of FET College graduates in the engineering sector. In essence, the research aims to uncover the underlying factors that influence the degree to which FET college graduates are employed into the market. As part of this research it is important for us to understand how FET college personnel experience this unique dynamic. During this discussion we would like to find out what your perceptions and opinions are. All information shared during this interview will be treated confidentially and will be used for no other purpose than research. The interview / discussion will only take approximately **40** minutes to complete.

SECTION A – QUALITATIVE DISCUSSION

1. Tell me a bit about your experience in dealing with the engineering industry in terms of placing graduates?

_____

_____

2. Is there a relationship between the college and HR departments of companies?

Yes	No

3. If YES, explain the nature of this relationship:

4. Do you feel well equiped to train and prepare FET students for the job market? Please comment.

Yes	No

Please give reasons for your answer?

5. Is there a difference in employment prospects of those in learnerships and those in apprenticeship routes to artisan training?

Yes	No

Please give reasons for your answer?

6. What kind of interventions do you as FET colleges have to make in order to improve the quality of engineering graduates with the skills valued by employers?

7. In your experience, are FET College graduates in learnerships adequately prepared for the job market?

Yes	No

Please give reasons for your answer?

8. In your experience, are FET graduates in apprenticeships adequately prepared for the job market?

Yes	No

Please give reasons for your answer?

9. What skills does the engineering market typically look for in graduates when recruiting?

10. How receptive are employers to FET graduates in your experience? Please elaborate on your answer:

11. What in your opinion could be some of the reasons why FET college graduates are not hired into the engineering market?

12. Please mention the 3 most positive aspects about FET colleges / graduates?

-
-
-

13. Please mention the 3 most negative aspects about FET colleges / graduates?

-
-
-

14. Do you feel graduates from other institutions (such as Universities) have any advantages above FET college graduates? Please elaborate.

15. What role can SETA's play to ensure that FET colleges meet the employer demand in the engineering sector?

16. What role can the government play to ensure that FET colleges meet the employer demand in the engineering sector?

17. What role can FET colleges play to ensure that they meet the employer demand in the engineering sector?

SECTION B – ADDITIONAL QUESTIONS

18. How many students obtained an engineering qualification from your college within the last year?

19. What was their predominant gender?	
1	Male

2	Female

20. What was their predominant cultural group?	
1	African
2	Asian
3	Coloured
4	White
5	Other

I am now going to ask you a series of statement questions regarding the graduates of FET colleges and other tertiary institutions.

On a scale from 0 to 10, **where 0 indicates "Not at all"** and **10 indicates "Fully"**, please rate the following statement. You can also choose any number in between or "Don't know", depending on your evaluation.

		Not at all									**Fully**	**Don't Know**
		0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**
21	How secure do you feel graduates will be at their new jobs, based on the education they received from FET college?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**DK**

On a scale from 0 to 10, **where 0 indicates "Much worse"** and **10 indicates "Much better"**, please rate the following statement. You can also choose any number in between or "Don't know", depending on your evaluation.

		Much worse						Much better					Don't Know
		0	1	2	3	4	5	6	7	8	9	10	DK
22	In your opinion, how does the FET engineering qualification compare with that of tertiary institutions?	0	1	2	3	4	5	6	7	8	9	10	DK

23. Is there anything we haven't touched on during our discussion which you would like to mention / discuss?

Thank you for your valuable inputs!