An Evaluation of Polytechnic Strategies to Industry Personnel Needs

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Abstract. Strategic management has been taken on-board by polytechnics in Zimbabwe with a mission to produce quality graduates for the formal and informal sectors. This paper evaluates the effectiveness of the polytechnic’s strategies in meeting industry personnel needs. A case study method was adopted with data collected from managers drawn from different industries, polytechnic’s management, students and academic staff. Analytical techniques used include: matrices of correlations, cross tabulations, and univariate analysis. While literature emphasizes the importance of resources for successful implementation of strategies, this study revealed otherwise. With inadequate resources, Bulawayo Polytechnic managed to produce quality graduates, relevant to its customers.

Key Words: Strategic management, polytechnics, industry personnel needs.
1 Introduction

Strategic management whether formal or informal is an invaluable tool in any business. “The attainment of an appropriate match or fit between an organisation’s environment and its strategy, structure, and processes has positive effects on the organisation’s performance (Wheelen & Hunger 2002:4). For its strategy to be effective, Bulawayo Polytechnic must produce graduates that are “right” for the industry. The revised strategic plan of January 2005 captures this, where, as a strategic goal to improve the quality of polytechnic graduates, the institute’s objective is to monitor the employment rate and performance in the work environment of polytechnic graduates with the aim of determining graduate utilisation rate.

Bulawayo Polytechnic is a public institute that provides training to students in different divisions, namely: commerce, mechanical engineering, electrical engineering, civil and construction engineering, automotive engineering, applied science, applied art and adult and continuing education.

Public institutes have been facing a wide range of challenges, which could affect the implementation of their strategies and hence the quality of training and of graduates. Some of these reasons have necessitated the proposed research. The pace of change in the industry has also been relatively different to that of the government run institutes of learning in terms of technological development and human resources development. Because of this disparity there is a general assumption that the graduates that are produced by the Polytechnics are “half backed” and soon after graduating would require additional training. This study evaluated the extent to which the Bulawayo polytechnic’s strategy was aligned to the needs of the industries that it services.

1.1 Justification of the Study

Despite Polytechnics going through various activities of producing graduates for industry such as: crafting strategies, training the students and carrying out strategic plan reviews, the end users’ perception of the graduates has not been investigated. Carrying out reviews internally would not expose most weaknesses or even the strengths. This research is therefore justifiable in the sense that it evaluates the relevance of the strategies, their effectiveness and weaknesses in the
training of students and the eventual perception of these graduates by the current
students, staff, management of Bulawayo Polytechnic and most importantly
industry.

1.2 Research Problem and Hypothesis
The research seeks to evaluate the strategic fit of the strategies pursued by
Bulawayo Polytechnic to the personnel needs of industry. To evaluate this fit, the
following research questions were looked at in the study:

1.6.1 Research question 1
Do the polytechnic strategies have an effect on the quality of graduates
produced?

1.6.2 Research Question 2
Is the crafting of polytechnic strategies guided by industry personnel needs?

1.6.3 Research Question 3
Are the polytechnic staffs guided by crafted strategies in their activities?

2 Literature Review
Contrary to beliefs of many that strategy is the solution to many business
problems such as the issue about competitive advantage, Choudhury and Inkpen
in Mintzberg et al (2005) suggest that strategy absence need not be associated
with failure. Instead, these authors suggest that there should be an intention to
reduce strategy in a business that has one, in order to make the business more
flexible to the ever-changing environment. In this dynamic environment, the
change may be faster than the rate at which strategy may need to be revised.
Strategy tends to make the firm rigid in its response to industry needs. This school
of thought has its emphasis on the need to reduce the rigidity of decision-making
brought about by the strategic decision making patterns.

Mintzberg et al (2005) concur that strategies are to organizations what blinders
are to hoses since they keep them going in a straight line, but impede the use of
peripheral vision. Wheelen and Hunger (2002:4) suggest that, “the attainment of
an appropriate match or “fit” between organization’s environment and its strategy,
structure, and processes has positive effects on the organisation’s performance”. It
was therefore the basis of this research to evaluate this “fit” between Bulawayo
Polytechnic’s strategy and the industries that it serves.
2.1 Knowledge Gaps
Strategic management is a management practice that many executives in Zimbabwe have willingly taken on board. However many organisations manage to formulate the strategies but before the process is complete, they abandon the whole activity in favour of the old ways of doing business. Literature is available on general strategic management. Public institutes such as Bulawayo Polytechnic have to find appropriate ways of using strategic management theories that best fit their situations such as how to attain a strategic fit with their customers.

There is usually a gap between strategic intent of an organisation and goals. The factors affecting this gap vary from industry to industry and from organisation to organisation. General strategic management literature cannot fully address the reasons for these gaps. Each organisation has its unique problems, which need to be addressed individually. This research therefore sought to find out, specific to the organisation in question, the fit of the organisation’s strategies to the realized strategies and possible reasons for mismatch.

2.2 Application of Strategic Management to the Public Sector
The benefits of strategic management in the public sector have not been as conclusive as they have been in the private sector. There has, however, been a link between strategic planning and growth according to Wheelen and Hunger (2002). The recent application of competitive advantage by the public sector may be due to the gradual movement of the government towards increasing the revenue base for its various Ministries from fees collected rather than from taxpayers. As a result, competitive advantage over other institutions becomes a necessity. However, besides institutional advantage, the concept of competitive advantage is not wholly relevant to the public sector as it still sets aside the main objective of profit making.

3 Research Methodology
This research took a case study method defined by Robson in Saunders et al., (2000:94) as the “development of detailed, intensive knowledge about a single case or a small number of related cases”. The case study also provided insights into
“why and how” the strategies of Bulawayo Polytechnic fit or do not fit with the customer needs (Kane and ‘Reilly-De Brun 2001).

3.1 Polytechnic Sample
At the polytechnic there were two thousand four hundred and fifty two (2452) potential respondents and a ten (10) percent sample was drawn from students and academic staff. Due to their manageable size, all the eight heads of divisions were selected for the study. The population at the polytechnic in 2006 at the time of the research excluding management was distributed as contained in Table 3.1

Table 3.1 Distribution of lecturing Staff and Polytechnic Students

<table>
<thead>
<tr>
<th>Division</th>
<th>Students</th>
<th>Lecturing Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult and Continuing</td>
<td>62</td>
<td>10</td>
</tr>
<tr>
<td>Applied Art and Design</td>
<td>64</td>
<td>15</td>
</tr>
<tr>
<td>Applied Science</td>
<td>323</td>
<td>40</td>
</tr>
<tr>
<td>Automotive Engineering</td>
<td>244</td>
<td>23</td>
</tr>
<tr>
<td>Commerce</td>
<td>1059</td>
<td>45</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>235</td>
<td>26</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>195</td>
<td>21</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>270</td>
<td>38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2452</strong></td>
<td><strong>218</strong></td>
</tr>
</tbody>
</table>

3.2 Industry Sample
Judgemental sampling for specific organisations employing the many polytechnic graduates was carried out as random sampling was not feasible and was limited to industries in Bulawayo due to various constraints. The selected organisations were the biggest employers selected according to recommendations by Bulawayo Polytechnic's divisions.

3.3 Research Instruments
The research used two instruments, in the form of a structured questionnaire and semi structured interviews. Interviews were preferred for polytechnic management and industry since the research was not general but specific in nature (North et al., 1983, cited in Saunders et al 2001). This was to allow the managers the opportunity to receive feedback and assurance on what the information was being gathered for.
3.4 Administration of the Questionnaire/Data Collection

The questionnaires were personally administered by the researcher for the Polytechnic staff resulting in a 91% response rate while that delivered to students was through the lecturers and it resulted in 74% response rate. All interviews were carried out as planned, through prior appointments.

3.5 Interpretation of Data

Data was interpreted using, the qualitative data analysis technique of conceptualisations, exploratory data analysis approach which emphasized the use of diagrams and the descriptive statistics. The choice of statistics used was guided by the research questions and the objectives of the study. On the qualities of the polytechnic staff the research established the cause and effect relationship of staff development as related to the number of years served in the organisation. Correlations of various variables were also run on the SPSS software. Descriptive statistics enabled the research to compare and describe variables numerically.

4 Data Analysis

4.1 The Polytechnic Strategic Planning Process

A question find out who was involved in the formulation of strategies resulted in 75% (15) of the polytechnic staff indicating that they were not involved in the planning process. This is contrary to the trend taken by many higher education institutions such as the Mozambican Catholic University, Tanzania’s Higher Education and Quinnipiac University that took on the participatory approach. The importance of involvement is also highlighted by Lynch (2006) who suggested that participation in the strategic planning process affects the ownership and implementation of the programme. With the polytechnic involving only a quarter (25%) of its staff, ownership of the strategic plan would therefore be resident mostly in management levels.

4.1 Awareness of Vision and Mission

Staff at the polytechnic was asked whether they were aware of the vision and mission of the college. Despite low involvement in the strategic planning process, Fourteen (70%) of staff were aware of the vision and mission, a result also confirmed by correlation statistics.
4.2 Leadership and the Implementation of Strategies

There were mixed results on the effect of the leadership style applied by the polytechnic management. Staff was asked to state whether they were satisfied with the leadership styles/s used at the polytechnic. The response of management was contradictory to that of staff. Management claimed that they largely used democratic and consultative style of leadership while sixty per cent (12) of staff felt that the autocratic style dominated the choice of leadership.

If the function of a leader, according to Dess et al (2004) is to determine the direction, and design of an organisation and also nurture a culture dedicated to excellence and ethical behaviour, this was lacking at the polytechnic as most of the leadership style was rejected by the academic staff.

However, the polytechnic management’s response was that the leadership style used was consultative and acceptable to all staff in general though one of the management respondents had this to say:

We use a democratic leadership style in the division, though occasionally some autocracy is applied to get things going. Moreover, it is difficult to please every individual.

The principal’s office also indicated that the institute used the consultative approach to most issues and as such, the various divisions were assumed to be doing the same. In addition, the respondent from the principal’s office had this to say:

We consult with the heads of divisions on most issues. When we consult with them, we ask them what the views of their divisions are. We have not gone back to the divisions to find out whether these views are from the heads of divisions themselves or from all members through consultations, but we are aware that in some divisions there are no consultations.

Inappropriate leadership styles could lead to more frustrations of the lecturing staff and impact negatively on the implementation of the institute’s strategies and hence the quality of graduates.
4.3 Motivation and Salary/Wages Adequacy

Figures 4.1 and 4.2 show the responses to motivation and salary levels of staff.

**Figure 4.1 Salary/Wages Adequacy**

**Figure 4.2 Motivation of Lecturers**

Only (6) 30 percent of the respondents expressed satisfaction with the salaries when asked to rate how good they were. As for motivation, an appalling 90 percent indicated that the general level of motivation was low. All the polytechnic heads of divisions and top management confirmed the low levels of motivation, which they inferred was a result of the poor salaries. A top management representative had this to say:

"I have to admit that working conditions are poor and this has affected the motivation of our staff. However, our success rate does not reflect these working conditions, as our graduates have not performed badly out there."

On that note, the implementation of the polytechnic strategies were facing more challenges, since the polytechnic was not in control of wages and salary levels.

4.4 Academic Staff Qualifications and Course Levels Taught

An analysis of the qualifications of the lecturers and the highest level of courses taught also revealed an anomaly as shown in tables 4.1 and 4.2 below.

**Table 4.1 Highest Course Level Taught**

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Diploma</td>
<td>3</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Higher National Diploma</td>
<td>8</td>
<td>40.0</td>
<td>55.0</td>
</tr>
<tr>
<td>Degree</td>
<td>9</td>
<td>45.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2 Highest Academic Staff Qualifications

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Certificate</td>
<td>9</td>
<td>45.0</td>
<td>45.0</td>
<td>45.0</td>
</tr>
<tr>
<td>National Diploma</td>
<td>4</td>
<td>20.0</td>
<td>20.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Higher National Diploma</td>
<td>5</td>
<td>25.0</td>
<td>25.0</td>
<td>90.0</td>
</tr>
<tr>
<td>Degree</td>
<td>2</td>
<td>10.0</td>
<td>10.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

While the highest qualifications for the academic staff ranged from national certificates (45%), to degrees (10%), the highest levels taught ranged from national diploma to degree level. The results indicated that lecturers holding National Certificates were also teaching higher level courses (national diploma) than their qualifications. No respondent indicated that the highest course level taught was national certificate though, 45 percent of the lecturers had a national certificate as their highest qualification. These results were contrary to what other higher education institutes were focusing on. The University of Dar es Salaam is quoted as saying that “a university is as good as the quality of its staff”. And as such, PhD training was planned for academic staff while masters’ degrees were planned for both academic and technical staff besides sabbaticals and short-term training and exchange programs. The importance of the human resources was also highlighted in the strategic goals of the State of Virginia’s Higher Education Board (Palmiero 2002) and the Catholic University in Mozambique, (John et al 2006).

4.5 Adequacy of Training Resources

Students were asked to rate the availability of training resources such as stationery, workshop equipment and machinery, tools and consumables. Tables 4.3 illustrates that 71% of the one hundred and eighty five (185) students found training resources inadequate and were supported in this perception by 95 percent of the academic staff.
Interviews with both the polytechnic management and industry management also acknowledged the inadequacy of resources which were affected by the availability of finance. Johnson and Scholes (2002) suggested that, where there is no money there is no strategy, while Michael Porter in Grant (1998) was of the idea that there should be continuous investment in resources and capabilities in order to maintain competitive advantage. The polytechnic strategies were therefore facing a serious handicap and as such the quality of graduates was at stake and could not be expected to be suitable to the industry personnel needs.

### 4.6 Involvement of External Stakeholders in Strategic Planning

#### 4.6.1 Involvement in the Review of Curricula by Industry

Sixty percent (60%) of academic staff felt that the industry was not actively involved in the review of the curricula. This was however contrary to the polytechnic’s management (both top and middle) who all suggested that industry was a key stakeholder in any curricula review and were always invited to review workshops.

#### 4.6.2 Period Taken to Review Curricula

Fig 4.3 illustrates that 45% of the curricula was four (4) years old or more while only 15% was a year old or less. Failure to review curricula regularly would render training irrelevant due to the changes that could be taking place in the industry, to which Johnson and Scholes (2002:169) suggest that “what is valued varies with time”.

### Table 4.3 Adequacy of training resources (Students Response)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>55</td>
<td>29.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>77</td>
<td>41.6</td>
<td>71.4</td>
</tr>
<tr>
<td>Agree</td>
<td>42</td>
<td>22.7</td>
<td>94.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>11</td>
<td>5.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>185</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
One of the ways of creating a strategic fit could be through involving industry in the design of curricula and programmes. Johnson and Scholes (2002:5) support involvement by suggesting that the organisation could have a strategic fit through “correct positioning ... in terms of the extent to which it clearly identified market needs”. In addition, the strategic goal number three of Bulawayo Polytechnic is to strengthen partnerships and networks with relevant organisations and institutions through consultations with all stakeholders. Despite this lack of involvement and a long time taken to review curricula, all respondents found the graduates suitable for the market.

4.6.3 Divisional Advisory Boards

The polytechnic and industry were asked about how often the two parties consulted with each other regarding training. Polytechnic management (75%) indicated that consultations with industry were done mainly through sub-advisory council meetings held in each division. Some divisions did not hold these meetings due to time constraints by industry.

Sixty-three (63%) percent of the industrialists did acknowledge involvement in training through their representatives in the divisional advisory boards and the college’s main board. This variance with the polytechnic’s response may be due to communication problems among different groups. Despite these variations, Bulawayo Polytechnic’s top management and the main advisory Board of the Polytechnic had structures in place guided by the Ministry’s policy on how divisions were supposed to interact with industry.
4.7 Relevance of Training to Industry Needs

The polytechnic students and staff were asked to agree or disagree with the statement: Training is relevant to industry needs. A total of fourteen (70%) from twenty (20) polytechnic staff noted that the industry was pleased with the quality of graduates. This was supported by one hundred and thirty four students of the one hundred and eighty five (74%) (Table 4.4) of the polytechnic’s students who felt that training was in line with the industry needs and trends.

Table 4.4 Training Relevance to Industry (Students Response)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cumulative</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
<td>7.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>33</td>
<td>17.8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>95</td>
<td>51.4</td>
</tr>
<tr>
<td>Agree</td>
<td>42</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>99.5</td>
</tr>
</tbody>
</table>

The polytechnic’s seven out of eight heads of divisions also confirmed the relatively high quality of graduates according to their own evaluations.

The industry that is expected to absorb most of the polytechnic’s graduates had their own view about the quality of graduates. All the respondents from the different industries confirmed the suitability of graduates to their needs. One industrialist had this to say:

The polytechnic graduates are acceptable to our standards though when they are still fresh from college we need to train them on some machines they may not have had an opportunity to operate during their training.

This view was shared by seven out of eight industry respondents. The one respondent that had a slightly different view from the others remarked:

We are very happy with the Bulawayo Polytechnic graduates. Actually, any job we get in our opening we make sure we fill it up with a graduate from the polytechnic.
4.8 Perceptions of the Polytechnic Graduates’ Quality

4.8.1 Industry Response on the Quality of Graduates

All the industry respondents mentioned that the graduates were relevant to their needs, though with minor reservations. For commerce, the concern was mostly on insufficient knowledge on information technology by the graduates. In the engineering sections the industrialists were worried about the equipment used by the polytechnic as most of the graduates had to be retrained on equipment not known at the polytechnic. The graduates were said not to have any problems regarding the theory behind most aspects. Despite these drawbacks, the industrialists on the overall all felt that the polytechnic graduates were of acceptable standards to them.

Academic Staff Perceptions on the Quality of Graduates

Figure 4.4 Quality of Graduates (Staff response)

The polytechnic staff also agreed with the industrialists (Figure 4.4) in terms of the quality of graduates where the majority (65%) with a mean of 2.7 in a scale of 1 to 4, were of the opinion that the polytechnic graduates were suitable for the industries that they were trained for. Because of this, hypothesis 5 stating that the involvement of the industry in the training of polytechnic graduates has a bearing on the quality of graduates was rejected as illustrated by the evidence.

4.9 Summary

The analysis revealed that the polytechnic's strategic plan was internally resident with management as was the formulation from the view of the academic staff. The institute was also characterised by low motivation among the academic staff.
because of the poor working conditions, confirmed by both the staff and management of Bulawayo Polytechnic.

On the background of inadequate physical, human and financial resources confirmed by the four different groups of respondents, the products of the polytechnic (graduates) were suitable for the industry needs. This was despite the implementers largely suggesting that the polytechnic strategies were not feasible. The quality of training was relevant to the industry needs as evaluated internally by the students, staff and management and externally by the industries that employed the graduates. The reservations put forward by industry were only on the lack of modern plant and equipment and not on the graduates in general.

5 Conclusions and Recommendations

5.1 Conclusions

The conclusions reached in the study are summarised below.

5.1.1 Perceptions of the Bulawayo Polytechnic’s Staff on the Institute’s Strategies

The academic staff, exclusive of management, had no confidence in the polytechnic’s strategies. The majority of them rated the strategies as not feasible, possibly as a result of their none involvement in the formulation process. Most of the strategies were dependant on a resource (financial resource) that the polytechnic did not have much control of. As a result, staff development in order to contribute towards the production of quality graduates was inadequate. Motivation was low and could also have resulted from the poor working conditions indicated in the results. The overall conclusion on research question one, from the hypothesis tested, is that while the low involvement resulted in the strategies being taken as not feasible (hypothesis 1) and the resource capabilities having an effect on the relevance of training to industry needs (hypothesis 2) no relationship was found between the polytechnic strategies and the quality of graduates. This is on the basis of the highly acceptable quality of graduates to industry despite the strategies not being feasible and resources being inadequate. This is a unique situation to the polytechnic.

5.1.2 The Perceptions of Industry on the Polytechnic’s Graduates

The industry viewed Bulawayo Polytechnic’s graduates highly despite negative implications found by the study. The role played by industry in the strategic
planning process was limited. To begin with, their involvement was limited with the greater number of the industrialists noting that they were not involved in the training of students and review of curricula. Involvement could have had the industrialists specifying to the institute what they expected the graduates to be competent on. In addition, any new developments could have been communicated to the polytechnic as soon as they came through. With their involvement, industry could have constructively criticised some of the polytechnic strategies while also bringing in a new ideas that could have had a better impact on the quality of graduates. Most of the plant and equipment owned by the polytechnic was obsolete and as such was not relevant to the industry. Despite these and other drawbacks highlighted in the study, the industrialists' conclusion was that the graduates were appropriate to their personnel needs. The study was therefore able to evaluate the perceptions of the industry on the Polytechnic's graduates despite the negative implications on the strategies highlighted.

5.1.3 Analysis of the Gap between Industry Requirements and Strategies Pursued by Bulawayo Polytechnic

The conclusion on the gap between the industry requirements and strategies pursued by the polytechnic was not as conclusive. The only gap mentioned by the industrialists and confirmed internally by the polytechnic was the obsoleteness of most of the plant and equipment in most cases and the lack of or inadequacy of other resources in some cases. As a result, the graduates when employed in industry came across machinery and equipment, which they could not adequately operate. In addition, because the industry was in general, satisfied with the polytechnic's graduates, though many of the strategies were affected by various unfavourable conditions it was difficult to infer most of the strategies pursued by the polytechnic to the quality of graduates. Contrary to literature cited earlier, the strategic plan was mostly formulated by management and people issues were at their worst with: low levels of commitment of staff, low levels of motivation, poor leadership styles, no assistance for staff development, inadequacy of resources (both human and physical), staff
qualifications that were below the minimum levels (national certificate) and less than average involvement of industry. Despite these handicaps, the majority of respondents were satisfied with the polytechnic’s graduates. On the background of these and other problems not highlighted, the strategic fit of Bulawayo Polytechnic’s strategies to the industry personnel needs could not, however, be conclusively determined because, while the personnel needs of the industry were met, it was not possible to associate them to the polytechnic’s strategies without further inquiry. Neither could these strategies be written off, as the results of the activities carried out showed correlations to the relevance of graduate training to industry needs. The results therefore suggest that the quality of graduates was not as a result of the strategies pursued by the Bulawayo Polytechnic since most of the strategies were facing negative constraints in their implementation. This also reveals the uniqueness of the situation where graduates were perceived by the industry as relevant to their personnel needs despite a strategic plan implemented under extreme adverse conditions revealed by the study. A variable at play not yet discovered, that result in the product being perceived as favourably when the conditions would have suggested otherwise, still needs to be discovered. A starting point could be the investigation of input and part played by the students in the education and training process in the adverse and negative conditions revealed in the study.

5.2 Recommendations

Despite the polytechnic graduates being confirmed relevant to industry personnel needs the strategic plan faces challenges some of which can be controlled by the polytechnic while others are beyond the institute.

5.2.1 Involvement of internal and external stakeholders

This needs to be improved. For internal stakeholders, involvement could increase the ownership of the programmes and improve the communication process while reducing resistance to change. Involvement of external stakeholders through consultations, advisory councils and in curriculum reviews and development could align training to industry’s current trends and needs. The curriculum also needs
to be reviewed regularly preferably in less than the four years and above revealed by the study.

5.2.2 Staff Development/Staff Qualifications
Though there are constraints in staff development, the institute should strive to upgrade its staff who are teaching courses at the same levels with their qualifications or worse still those teaching at course levels higher than the qualifications they possess. Imagine a primary school grade seven graduate teaching a grade seven student or worse still a form one student. Such situations obviously would influence the quality of graduates. From the limited financial resources that the institute has control of, some of it, if possible, should be channelled towards staff development, short-term training and sabbaticals, as is done by some universities mentioned in the study.

5.2.3 Motivation of Staff
It may be difficult, but for effective implementation of the strategies set, the implementers need to be motivated in order to attain long lasting commitment to the strategic goals of the institute of which the production of quality graduates relevant to the industry needs is the most prominent. Motivation of staff could be improved through: releasing staff to develop themselves, employing appropriate leadership and acceptable leadership styles, making efforts to at least provide the minimum required training resources, and involving them in decision making such as in the strategic planning processes and reviews.

5.2.4 Tracer Studies
It is also recommended that Bulawayo Polytechnic should put in place tracer studies in order to get conclusive results of the quality of graduates, and programmes. The tracer studies could also determine the adequacy and relevance of curricula and programmes while also exposing systematic gaps and anomalies in the education and training.

5.2.5 Suggestions for Future Studies
While a case study was carried out focusing on Bulawayo Polytechnic, this could be extended to other polytechnics in the country. The study could also be extended to cover a larger sample of organisations and industries around the country. With
the aid of tracer studies, the research could also be spread to neighbouring countries where graduates also get employment.

5.3 General conclusion
Just like in the corporate world, the stakeholders clearly need to be involved in order to produce products suitable for the customers’ needs. However, evaluating strategies in the public sector is not as simple as shown by the results of the study, which despite having discovered many shortfalls of the strategic planning and implementation process still resulted in suitable graduates for the industry. The polytechnic can, however, not relax and assume that its strategies are in line with the industry needs. Instead, the key variable in the strategy that accounts for the ability to produce relevant graduates for the industry despite the many shortfalls mentioned still needs to be discovered and developed further. The results indeed show that measuring the effect of the strategic plan on the products of the institute is not as easy as it is in the corporate world as literature has warned before. Bulawayo Polytechnic also needs to address its problem of low levels of motivation, commitment, mediocre staff qualifications and inadequacy of resources. These problems as found by the study have not yet manifested themselves into the quality of graduates who are still suitable to the needs of the industry but have got the potential to.
References


