ABSTRACT

This paper aims at assessing the teaching-learning process of professionalization within the framework of the Bachelor’s, Master’s and PhD, which is a reform in Higher Education. The study was a descriptive survey with a sample of forty lecturers from the University of Buea. A closed-ended questionnaire was constructed with the following as indicators of the teaching-learning process: Availability of human and material resources, teaching methods and assessment strategies, derived from a review of literature and rated on a four-point scale. The instrument was validated by eight lecturers and the validity index stood at 0.86. Data were analysed using the SPSS package. Professionalization demands a student-centred approach to teaching and learning where the ICTs, methods of teaching, and assessment strategies that reflect critical thinking are key. Findings reveal the insufficient human and material resources while teaching activities and assessment averagely reflect professionalization. The pedagogic aspect of professionalization needs more attention.

*Keywords*: Professionalization, BMP, University of Buea, Higher Education.

1. INTRODUCTION

The Bachelor’s, Master’s and PhD (BMP) is a reform in Higher Education (HE) which has as one of its goals, the professionalization of education. The main aim of professionalizing programs in HE is to train qualified national human resources. Professionalization in HE came up because graduates from the University of Yaoundé did not receive the type of education required by a demanding private sector. When public sector employment became saturated, graduates found themselves ill-equipped for employment in the private sector or for self-employment. Consequently, one of the key goals of the 1993 reforms was professionalization of the teaching programmes. In order to achieve this objective, universities were required to define, in consultation with other stakeholders, the local market needs, involve professionals in the conception of programmes, define the prerequisites for admission into the different professional programmes, and draw up the profiles of teaching staff to be recruited (Njeuma, Endeley, Mbutum, Lyonga and Nkweteyim, 1999).

Educational reforms usually usher in some changes in one or more components of the curriculum. In drawing attention to the nature of system change, Coburn (2003) observed that
reforms must effect deep and consequential change in classroom practice. Such change needs include changes in materials, classroom organization, or the addition of specific activities, interaction, and pedagogical principles as enacted in the curriculum.

For professionalization to be successful the teaching-learning process is critical because it is a key factor in educational outcomes. Professionalization demands that students be active in the teaching-learning process so that they can acquire critical thinking/problem-solving skills and be able to effectively take part in societal development. Attendant recommendations for professionalization have focused on reestablishing an education community, developing programs for role modeling and mentoring, establishing a structured curriculum dealing with professionalism, and attention to the evaluation of professional conduct (Hatem, 2010).

1.1 Purpose of the Study and Research Questions

The study aimed at finding out the extent to which teaching and learning at the University of Buea reflect professionalization within the framework of the BMP. The research questions are:

• To what extent does the human resources at the University of Buea reflect professionalization?

• To what extent does the material resources in the University of Buea reflect professionalization?

• To what extent does the teaching methods/activities in the University of Buea reflect professionalization?

• To what extent does the evaluation strategies in the University of Buea reflect professionalization?

1.2 Statement of the Problem

Higher Education is expected to take the lead in solving one of the country’s most critical problems which is unemployment. This goal has resonated with the external dimension of the adopted Bologna process to diversify and professionalize programs. A lot has been done so far to facilitate the implementation of the BMP in the University of Buea. With regard to the teaching/learning process syllabi were revised with programmes highly diversified and emphasis placed on lectures, tutorials and practical; graduates’ employability and professionalism are to be ensured through internships, short courses and production. Teaching methods to emphasize student effort in student-centered learning was introduced; workshops were organized to orientate students and lecturers on the BMP and more. Five years after laying this groundwork it is appropriate to find out to what extent teaching and learning are reflected professionalization. This is an important contribution to quality assurance because the teaching-learning process is a key determinant of learning outcomes.

2. BACKGROUND

Recently, the degree structure reforms in Cameroon can be said to have been influenced principally by the Bologna Process which took place in Europe since 1999. It is necessary to note that most African countries are former European colonies. After independence, most of the African countries adopted the European colonial cultures and structures in education.
Westwood, Leinster and Weinberg (2008) assert that with most of Europe, having adopted a common degree structure through the Bologna Process, such ex-colonial networks were seen to be fading in favour of global networks. The Bolgna agreement signed by European Union Heads of Government, discussed the relevance of curricula to employment. It aims to influence change in basic and continuing professional education that include work-based, practice-based and lifelong learning. The central ethos which is a credit transfer system to facilitate student mobility between institutions for the development of professional qualifications was therefore the necessity for commensurate adjustments in order to avoid the risk of losing mobility and comparability.

The Bologna Process is a major HE innovation whose impact is felt worldwide. Efforts are being made to study what has become known as the external dimension of the Bologna Process – the implications of the Bologna Process in other parts of the world. The Cameroon government adopted the Bologna Process and later HE implemented it in 2007/2008 (University of Buea Academic Office, 2009).

The year 2007 marked a turning point in HE with the introduction of the BMP/LMD system. In 2005 member countries of the Economic Community of Central African States (CEMAC), had adopted the Bologna Process, referred to as BMP (by Anglophones) or LMD (by Francophones) systems. Member States (CEMAC) signed the Libreville Declaration of February 2005. In October 2007, the BMP/ LMD system was officially launched within Cameroon’s HE system. Certificates such as Diplome d’Etudes Generales (DEUG), the Maitrise and the Diplome d’Etudes Approfondies (DEA), for Francophones and the Post Graduate Diploma (PGD) for Anglophones, were gradually phased out. The essence is to ensure the comparability of degrees or certificates, facilitate student and staff mobility and strengthen the quality and relevance of programmes (Tchombe, Nnane and Titanji, 2009).

3. CONTEXTUAL FRAMEWORK

According to the 2010 Annual Report of the University of Buea, in 2007, academic programmes were effectively revised. Major highlights of the revision process included the redefinition of the credit with one credit equivalent to 10 contact hours and the revision of syllabi with programmes highly diversified. This diversity was also reflected in course delivery with emphasis put on lectures, tutorials and practicals. To ensure graduates’ employability, the programmes were designed to lay emphasis on professionalism through internships, short courses and production. Teaching methods emphasized on student effort in student-centred learning. Of course, the implementation of the BMP meant erosion of the pre-BMP system. This required careful management to avoid problems. Consequently, a number of measures were taken to ensure a smooth transition from pre-BMP to the BMP system. For example, a list of transitional rules were published, a new format of matriculation numbers was introduced to differentiate between pre-BMP and BMP transcripts, and over the past three academic years (2007/2008 to 2009/2010) pre-BMP courses have been gradually phased out. Course equivalences were published during the 2009/2010 academic year and the Vice-Chancellor signed a service note (No. 2008/025/UB/VC of November, 2008) setting up the management structure of the BMP which has effectively gone operational in most Departments.

One of the BMP implementation strategies was the improvement of teaching through the use of appropriate technologies and methods. Accordingly, in the 2008/2009 academic year, a lot of the technological training which had begun in 2007 was applied in teaching. Some programmes started using the internet either to post assignments, to students or for teleconferencing between students and lecturers based in institutions abroad. The University Library also made progress in its effort to digitise the library. Meanwhile, the academic office continued to reinforce knowledge of teaching methods within the BMP system.
4. LITERATURE REVIEW

(a) Human Resources and Professionalization

HE staff usually consists of the full-time staff, Graduate Assistants and non-academic staff. These various categories of people have their roles in achieving the goals of HE. The HE teacher has been viewed from two perspectives: the philosophical and the scientific. The philosophical role consists in enlarging the mind of the student through bringing him into contact with the scholarly and cultured companions while the scientific view of the teachers’ role emphasizes the need to inculcate a body of knowledge. The traditional role was further emphasized by a dominant traditional teaching method – the lecture (Badley, et al. 2006). In the 21st Century classroom, teachers are facilitators of student learning and creators of productive classroom environments in which students can develop the skills they will need in the workplace. If teachers and the universities in which they work adopt a more student-centered view of teaching, their students will learn more deeply, and they are more likely to be intellectually and morally transformed by their university experience. Teaching conducted by GAs represent a significant portion of the total instruction at universities. The duties of Graduate Assistants (GAs)1 will be grouped under four categories and discussed.

(b) Tutor Students

Graduate teaching Assistant tutor undergraduate students. They lead discussion sessions and respond to students’ questions posed verbally and electronically through various delivery modes like class emails, twitter and others, and conduct other help sessions and mentor students (Brown-Wright, 1997).

(c) Assist Full-time Advisor in Planning for Instruction

GAs are expected to design power point presentations on the selected content, post notices, assignments and materials to students electronically in preparation for the class so as to enrich the discussions. They are expected to configure and manage servers to enhance interaction between the facilitator and learners and among learners. Such servers facilitate procedures like registration for courses, access to course outlines and course content, asking questions or seeking help and checking for grades. In preparation for instruction they also set up and manage the laboratory where they determine the nature of the chemicals, decide which ones are relatively safe, identify needed laboratory equipment, plan for a chemical storage and supervise the cleanliness of the laboratory.

(d) Research

GAs carries out research under the supervision of the supervising teacher or full-time advisor. They engage in literature searches, data collection, entry and analysis, assist a faculty member in a research project, and assist the faculty in the development of new material for their courses from research.

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(e) Perform a variety of Administrative tasks

They hold regular working hours during which they advise students’ organizations and individual students while making recommendations to either organization officers or full-time advisors and plan events like excursions.

(f) Teaching Methods and Professionalization

Professionalization calls for student-centred teaching which is a constructivist approach where the role of the teacher as facilitator (Alesandrini and Larson, 2002) helps students acquire knowledge through activities. Johnson and Johnson (1999) believe that one’s personal involvement in learning experience requires them to work in groups and interact in social settings based on the principle of Vygotsky’s social constructivism. Internships or practicals are good examples of a constructivist approach to teaching. Internships are the link between theoretical knowledge and concepts learned in the classroom setting, and real time industry applications. Internships have long been regarded as an important component in preparing undergraduate students for the entry-level job market. Internships provide students with valuable opportunities for growth through the shadowing of mentors, attendance at meetings, and actual performance of duties. Radigan (2009) found out that students who have participated in internships have reported better time management and communication skills, higher levels of self-discipline, increased initiative and have higher self-image concepts. Students participating in internships were found to have a significantly higher sense of career preparation over students without such experience in five skill areas: computer applications, creative thinking, job interviewing, networking, and relationship building.

Hussain (2012) asserts that traditionally, a teacher has been playing an active role in transferring knowledge to passive students. Gibbs (1982) argues that as HE teachers, we cling to the traditional method of lecture because we are ignorant, overworked, our attitudes obstruct change, institutional constraints support lecturing and more. In the new settings the stage is set for students to play an active role in the learning process through activities. Findings from the Lord, Travis, Magic and King (2005) revealed greater effects of learner-centered approach on weekly test scores of students as compared to students’ test scores in traditional or teacher-centered environment.

Moore (2001) identifies methods in learner-centred instruction as follows: discussion, cooperative learning, discovery learning, inquiry learning, simulation and games and individualized instruction. Tambo (2013) categorizes the above methods into four broad categories. There is indirect teaching which involves students in investigating, drawing inferences from data and forming hypotheses. This fosters creativity. Interactive teaching which includes discussion and cooperative learning is another category. Seaman and Fellenz (1989) assert that discussion helps learners to use the ideas, experience, insights and knowledge provided by the teacher or peer learners to develop social skills and abilities to organize their thoughts and to develop rational arguments. Any of the methods listed above could incorporate aspects of experiential learning, which is another category of teaching. It is learner-centred and activity oriented. According to Johnson and Johnson (1986), experiential learning is based on three principles: when students discover knowledge for themselves it is more meaningful, students learn best when they are personally involved in the learning experience and students are more committed to learning when they are free to set their own learning goals and to pursue them within a set framework. There is yet another category called independent study which is a range of teaching methods that are planned and provided to foster the development of initiative, self-reliance and self-improvement of students as individuals. However, Moore, (2001) cautions that the above methods are typically time-consuming.
(g) Instructional Materials and Professionalization

Infrastructure and educational media play a significant role in student-centred teaching. As colleges look to deal with new teaching methods, changing technology and a new generation of students, space plays a key role in HE. The classroom is being reinvented to support new pedagogies, the library is no longer a book warehouse, but a place for planned and random acts of teaching, learning and group work (Ball, 2010). The university library expresses a purpose, not just to collect but also to organize, preserve and make knowledge accessible. Today, every HE library occupies a central position. In its placement and prominence, the academic library conveys its integral role of supporting HE’s core mission of research and evaluation (ACRL, 2006). Student-centered teaching requires practice, making the laboratory another useful place which offers many opportunities, including very interesting applications of theoretical ideas. Technical and behavioural skills are learnt while still in college and before coming into contact with the real world.

Instructional material, particularly ICTs facilitate student-centered teaching and learning even though Coates, et al. (2004) argues that the relationship between the use of ICTs and student performance in HE is not clear and there are contradictory results in the literature. However, the usage of internet technologies in teaching has recorded some achievements: There is increased accessibility to reference materials and data for all categories of users, quickness of information retrieval, decrease in the cost of information delivery to users, individualized learning and teaching etc (UNESCO, 2003). Daniel (1996) asserts that technology equips students with the generic skills for lifelong learning. Breton (2009) identifies hypothetical situations and shows how e-learning responds to these situations. Two of them are discussed below:

Where student numbers are so high that the traditional format of tutorials is strained to breaking point, the lecturer can ask students to post observations and comments on the Virtual Learning Environment (VLE)’s discussion forum after the lecture and to respond to each other’s posts, kick started by the lecturer. The live seminar is used to conclude these discussions and to answer any outstanding questions which may have arisen from them. Also, when students are taking incomplete notes and are relying on the power-point handouts posted on the VLE as their main record of the lectures, the lecturer stops, distributing the power-point slides and instead asks the students to take thorough notes and post these within the VLE discussion board for their peers to see and comment on the accuracies.

(h) Assessment and Professionalization

Assessment of both the teaching-learning process and the student is important. With regard to teaching HE institutions must monitor and improve the quality of their programmes (Henard and Roseveare, 2012) and each has its own internal procedures for assuring and enhancing the quality of its programmes. Internal procedures include assessment of students, processes for the design and approval of new programmes and regular monitoring and periodic review of continuing programmes. Assessment tends to shape the learning that students do (Brown et al. 1997). Therefore, if we want to change the way our students learn and the content which they learn, the most effective way is to change the way we assess them. For example, if we want to test students’ ability to construct a coherent and reasoned argument, then the essay would be appropriate. But if we are more concerned with science students’ laboratory skills, an observed performance assessment scheme might be more appropriate (Norton, 2009).
5. METHOD AND MATERIALS

The study was a survey of a cross-sectional nature. A closed-ended questionnaire consisting of 24 items aimed at evaluating the teaching-learning process was designed, with indicators such as the availability of human and material resources, appropriateness of teaching-learning activities and assessment strategies, derived from a review of literature. A purposive sample of 40 university lecturers from four faculties was selected. These included the Faculty of Arts, the Faculty of Social and Management Sciences, the Faculty of Science and the Faculty of Education. Eight lecturers who did not constitute part of the sample validated the questionnaire and the validity index stood at 0.86. Participants were expected to rate indicators of the teaching-learning process on a four point scale ranging from strongly agree to disagree. Those who were willing to take part completed the questionnaire. A total of 34 participants completed and returned the questionnaire. Data were analysed descriptively based on the research questions using the SPSS package. Responses were considered positive if they scored a mean of 2.5 and above.

6. RESULTS AND DISCUSSIONS

Each item is stated as appeared in the questionnaire and the mean determines whether it had a positive or negative response.

(a) Human resources and Professionalization

Departments have sufficient teaching staff (2.0303); sufficient support staff (1.6061); sufficient Graduate Assistants (1.4242) and lack of experts in some areas (2.9412), giving a global total of 2.0000 much below the average mean of 2.5. Therefore, the University of Buea does not have adequate human resources. Human resources must be adequate for student-centred teaching to be effective. Astin (1984) asserts that one resource measure that is particularly popular is the student-faculty ratio. Many administrators believe that the lower the ratio the greater the learning and personal development that will occur. Without sufficient teachers, Graduate Assistants and non-academic staff, it is likely that the class sizes may be large, the teacher overworked and lecture becomes the predominant teaching method. Gibbs (1989) argues that one of the reasons why university lecturers use lecture is because they are overworked. This is confirmed by the findings on teaching methods and activities where teachers say they use lectures most of the time due to time constraints. In such an environment, student-centred teaching may be compromises, critical thinking and creativity necessary for the work place may not be achieved and the goal of professionalization may not be attained. This situation is further compounded by the lack of ICTs and internet connectivity which would have greatly facilitated the teaching of large groups and the use of individualized instruction. Therefore, with regard to human resources professionalization is not being attained.

(b) Material Resources and Professionalization

There is enough classroom space for students in the departments (1.8235); Departments have a good library (1.3235); Faculties have a good library (1.2941); Faculties have good laboratory facilities for practicals (1.4848); Faculties have ICTs for teaching (1.4118); teachers use ICTs for teaching (2.000); Faculties have internet connectivity (2.0294); Internet is available to teaching staff (1.3235); The internet connectivity is regular (1.6765). This brings the global total to 1.5963 which is also much below average. Without material resources professionalization cannot be attained. According to the Resource theory of Pedagogy (Astin,
1984), physical facilities like laboratories, libraries and audiovisual aids are believed to enhance students’ learning. The theory maintains that if adequate resources are brought together in one place, student learning and development will occur. Space plays a key role in HE. The classroom is being reinvented to support new pedagogies (Ball, 2010). So the use of student-centred teaching requires space. Also, every HE library occupies a central position. In its placement and prominence, the academic library conveys its integral role of supporting HE’s core mission of research and evaluation (ACRL, 2006). Therefore the absence of departmental and faculty libraries impede research and expert knowledge in various disciplines. Expert knowledge is an essential ingredient for professionalization.

Student-centered teaching demands practical work, making the laboratory another useful place which offers many opportunities, including very interesting applications of theoretical ideas. Technical and behavioural skills are learnt while still in college and before coming into contact with the real world. Also, the usage of ICTs in teaching has recorded some achievements: There is increased accessibility of reference materials and data for all categories of users, quickness of information retrieval, decrease in the cost of information delivery to users, individualized learning and teaching etc (UNESCO, 2003). Without adequate ICTs in the University of Buea therefore, teachers and learners may not have enough access to information, individualized instruction and the teaching of large classes would become difficult. This defeats student-centred teaching and the goal of professionalization.

(c) Teaching Methods/Activities and Professionalization

At least 50% of the time is spent in doing one form of practicals or the other (1.8788); I encourage discussions during teaching (3.5882); I give assignments for students to carry out research and report to class (3.4412); I have sessions where individual students come up with problem areas for discussion (2.9412); I have to lecture most of the time to save time (2.7500). Teaching methods/activities yield a global mean of 2.9198 which is positive.

The goal of professionalizing HE demands student-centred teaching. Student-centred teaching is taking place at the University of Buea but needs to be improved. Hussain and Sultan (2010) assert that HE aims at developing skills and competencies among students to live in the 21st Century. Therefore a university teacher should involve students in the learning process through activities aiming to inculcate academic and social skills among them. They would become capable of interpreting knowledge according to situations, making their own meaning out of it. Li, (2001) affirms this by stating that critical thinking, problem-solving approaches and analytical skills are assumed to be the essential constructs of HE graduates. Equipped with such facilities and skills they construct new knowledge based on their previous experiences and involvement in the learning process.

Findings also reveal that there are not enough avenues for internships. Internships offer students the opportunity to develop critical thinking, analytical and professional skills needed for the workplace that lecturers may not be able to impart. In preparing for a successful career in one of the most important steps is securing and completing an internship before graduation. It helps students gain real-world experience and offers them an educational enrichment as they apply knowledge and skills gained in class. Students may find that they understand concepts taught in class much easily after completing an internship. Unfortunately, students in the University of Buea may not adequately benefit from the above advantages which are key in achieving professionalization.

Therefore, to some extent, student-centred teaching is taking place at the University of Buea. However, the quality of this approach may be weakened by staff shortage, insufficient

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2Marriot School Business Centre. Importance of Internship
http://marriottschool.byu.edu/career/students/importanceOfAnInternship.cfm [Accessed 20/4/2014]
material resources and insufficient avenues for internship. These constraints in addition to the issue of time may also explain the use of lecture. Therefore, even though student-centred teaching is carried out in the University of Buea, it is plagued by many problems which cumulatively may make it ineffective and consequently not lead to professionalization.

(c) Assessment and Professionalization

The study assessed the students only through a written test (2.3333); Practicals and tutorials constitute part of my assessment (3.0625); I also encourage and reward student creativity (3.2353); there is effective monitoring of teaching (2.1765); there are enough avenues for internship around the University of Buea (1.9091). The responses yielded a global total of 2.5433 which is averagely positive.

Assessment for student-centered teaching is averagely positive, but there are two limitations for assessment which are critical in achieving quality professionalization: Internship and monitoring of the teaching-learning process. Monitoring is a kind of formative assessment which calls for improvement while a process is still going on. HE institutions must monitor and improve the quality of their programmes (Henard and Roseveare, 2012) and each HE institution has its own internal procedures for assuring and enhancing the quality of its programmes. Internal procedures include assessment of students, processes for the design and approval of new programmes and regular monitoring and periodic review of continuing programmes. Assessment tends to shape the learning that students do (Brown et al. 1997). Therefore, if we want to change the way our students learn and the content which they learn, the most effective way is to change the way we assess them. For example, if we want to test students’ ability to construct a coherent and reasoned argument, then the essay would be appropriate. But if we are more concerned with science students’ laboratory skills, an observed performance assessment scheme might be more appropriate (Norton, 2009). Without adequate classroom space and laboratories, performance assessment cannot be effective and the quality of professionalization would not be standard.

7. CONCLUSION

The teaching-learning process does not adequately reflect professionalization in the University of Buea. An average of the four global means (per research question) comes up to 2.2648, which is below the 2.500 cut off point. A curriculum reform should assume a systemic approach where if one component of a system is weak, the entire system may not achieve its goals. As such every component would be paid adequate attention. Efforts are being made to implement the goals of professionalization in the University of Buea and success has been reached in just two out of four areas: Teaching-learning methods/activities and assessment. But even so, these efforts have been thwarted by lack of human and material resources. Even if there were sufficient human resources and knowledge of the appropriate teaching-learning activities, without ICTs and other materials, student-centred teaching and assessment cannot attain a certain quality.

Also, the picture of the journey towards professionalization can only be gotten and appreciated through a regular monitoring of the teaching-learning process, using a bottom-up approach (Department-Faculty-Administration). This guides the university in prioritizing its needs. Without a monitoring mechanism, the effort of the university towards professionalization may not be relevant. This brings one to the conclusion that the principles of instructional design were not strictly respected in the BMP reform. Changes were made in the administrative part of the reform, but a lot still has to be done to enhance the pedagogical part because the importance of pedagogy in achieving learning outcomes cannot be overemphasized.
8. RECOMMENDATIONS

If professionalization must be realized policy makers in Cameroon must revisit financing of HE. In Cameroon fees are not paid in state owned universities. Students are required to pay only a token registration fee and so everybody has access to HE, resulting in overcrowding. This explains why human and material resources are hardly sufficient and student-centred teaching difficult to implement. If fees are paid to complement government subvention, the quality of education offered will improve as it will permit universities to acquire the necessary human and material resources. Meanwhile, admission quotas should be commensurate with resources. Secondly, needs must be prioritized and resources upgraded annually to respond to the new programmes and the ever increasing number of students who are admitted. Thirdly, with regard to internships, the University must reserve a period during which students will travel to places where they are required to practice, stay there and work, since the avenues for internship in the town in which the university is located are not adequate. During this period classes should be suspended.

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APPENDICES

Appendix 1: Human Resources and Professionalization

<table>
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<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
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<tbody>
<tr>
<td>My Department has sufficient teaching staff</td>
<td>34</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>My Department has sufficient support staff</td>
<td>33</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>My Department has sufficient graduate assistants</td>
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<td>4</td>
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<tr>
<td>My Faculty lacks teaching staff/experts in some areas</td>
<td>34</td>
<td>1</td>
<td>4</td>
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<tr>
<td>Valid N (listwise)</td>
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GLOBAL MEAN = 2.0000

Appendix 2: Material Resources and Professionalization

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<th>N</th>
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<th>Mean</th>
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<tbody>
<tr>
<td>My Department has a good library</td>
<td>34</td>
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<td>3.00</td>
</tr>
<tr>
<td>My Faculty has a good library</td>
<td>34</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>My Faculty has a good laboratory/facility for practicals</td>
<td>33</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>My Faculty has ICTs for teaching</td>
<td>34</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>I use ICTs (eg audio visual materials) in teaching</td>
<td>34</td>
<td>1.00</td>
<td>13.00</td>
</tr>
<tr>
<td>My Faculty has internet connectivity</td>
<td>34</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>The internet is available to all teaching staff</td>
<td>34</td>
<td>1.00</td>
<td>4.00</td>
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<td>The internet connectivity is regular</td>
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<tr>
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GLOBAL MEAN = 1.5963
### Appendix 3: Teaching-learning methods/activities and Professionalization

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<th>Maximum</th>
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<td>At least 50% of the time is spent doing one form of practicals or the other</td>
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<td>1.00</td>
<td>4.00</td>
<td>1.8788</td>
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<tr>
<td>I encourage discussions during teaching</td>
<td>34</td>
<td>2.00</td>
<td>5.00</td>
<td>3.5882</td>
</tr>
<tr>
<td>I give assignments for students to carry out research and report to class</td>
<td>34</td>
<td>2.00</td>
<td>5.00</td>
<td>3.4412</td>
</tr>
<tr>
<td>I have sessions where individual students come up with problem areas for discussion</td>
<td>34</td>
<td>1.00</td>
<td>4.00</td>
<td>2.9412</td>
</tr>
<tr>
<td>I have to lecture most of the time to save time</td>
<td>32</td>
<td>1.00</td>
<td>4.00</td>
<td>2.7500</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
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GLOBAL MEAN=2.9198

### Appendix 4: Assessment and Professionalization

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<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>I assess the students only through a written test</td>
<td>33</td>
<td>1.00</td>
<td>4.00</td>
<td>2.3333</td>
</tr>
<tr>
<td>Practicals and tutorials constitute part of my assessment</td>
<td>32</td>
<td>1.00</td>
<td>5.00</td>
<td>3.0625</td>
</tr>
<tr>
<td>I also encourage and reward student creativity</td>
<td>34</td>
<td>2.00</td>
<td>5.00</td>
<td>3.2353</td>
</tr>
<tr>
<td>There is effective monitoring of teaching (meetings, seminars) for the BMP in my Department/Faculty</td>
<td>34</td>
<td>1.00</td>
<td>4.00</td>
<td>2.1765</td>
</tr>
<tr>
<td>There are enough avenues for internship around the University of Buea</td>
<td>33</td>
<td>1.00</td>
<td>3.00</td>
<td>1.9091</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GLOBAL MEAN=2.5433