

Education, training and mentorship in pursuit of maturity in quantity surveying

Peer review

Abstract

The aim of this article is to determine whether professional quantity surveying firms are ready to meet the challenges facing them in respect of their responsibility towards the changing professional environment in terms of standards, education, professional development and training. Analysing the maturity of firms may assist the quantity surveying profession to establish its position and strategies. Results on project management maturity in South Africa, based on a research project conducted by the University of the Free State, in conjunction with the Wirtschafts Universität in Vienna in 2006 forms the basis of the article as well as the development of an education, training, mentorship and Continuing Professional Development (CPD) model to promote quantity surveying professional maturity.

Training in the quantity surveying profession in pursuit of maturity and excellence should focus on core functions of the quantity surveyor; competence required for registration; the expected services or outcomes that the profession believes it should be able to offer the market, and narrowing the gap between academic and experiential learning components by encouraging professionals to enhance their skills through CPD.

Generating standards, following the accreditation policy of the South African Council for the Quantity Surveying Profession (SACQSP) and research facilitation were found to be important aspects for education in the quantity surveying profession in pursuit of maturity and excellence.

A structured mentorship programme that addresses proactive development towards maturity should be introduced for the profession.

The Education, Training, Mentorship and CPD model to achieve quantity surveying professional maturity, developed by one of the authors, may assist in bridging the gap between the providers of formal education and the providers of quantity surveying service to clients towards professional maturity.

Keywords: Education, training, development, maturity, quantity surveying profession

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Abstrak

Die doel van hierdie artikel is om vas te stel of professionele bourekenaarfirmas gereed is om die uitdagings aan te pak in terme van die verantwoordelikheid wat hulle het teenoor die veranderende professionele omgewing van standarde, onderrig, professionele ontwikkeling en opleiding. Analisering in die bourekenaarprofessie mag firmas help om hul posisie en strategieë in terme van volwassenheid vas te stel. Resultate verkry van 'n studie oor projékbestuurvolwassenheid gedoen deur die Universiteit van die Vrystaat in samewerking met die Wirtschafts Universität in Vienna in 2006 vorm die basis van die artikel asook die ontwikkeling van 'n onderrig, opleiding, mentorskap en voortgesette ontwikkeling model om bourekenaar professionele volwassenheid te bevorder.

Opleiding in die bourekenaarprofessie in die strewende na volwassenheid en uitnemendheid behoort te fokus op kernfunksies van die bourekenaar; bevoegdheid vereis vir registrasie; die verwagte dienste en uitkomst wat die profesie glo hulle aan die mark behoort te lewer en die vernouing van die gaping tussen akademiese en indiensopleiding komponente deur professionele persone aan te moedig om hulle vaardighede deur voorgesette professionele ontwikkeling te verhoog.

Generering van standarde, gevolg deur die akkreditasie beleid van die Suid-Afrikaanse Raad vir die Bourekenaarsprofessie en navorsing fasiliteite is belangrike aspekte vir onderrig in die bourekenaarsprofessie in die strewende na volwassenheid en uitnemendheid.

'n Gestruktureerde mentorskapprogram wat proaktiewe ontwikkeling teenoor volwassenheid aanspreek, behoort aan die profesie bekendgestel te word.

Die Onderrig, Opleiding, Mentorskap en VPO model om bourekenaar professionele volwassenheid te behaal, wat deur een van die outeurs ontwikkel is, mag help om die gaping tussen die verskaffers van formele onderrig en die verskaffers van bourekenaar dienste aan kliënte te vernou.

Slutelwoorde: Onderrig, opleiding, ontwikkeling, volwassenheid, bourekenaarprofessie

1. Introduction

The Quantity Surveying profession in South Africa is currently experiencing change related to structure, required services offered and infrastructure products to members. Continuous professional development and improving standards, education, research and training are therefore relevant.

The problem addressed is whether professional firms are ready to meet the challenges facing them in respect of their responsibility towards development and the changing professional environment. The study investigated how maturity models may be applied as a quantitative tool. Maturity measurement may indicate the development levels of the profession. It is proposed that maturity analysis and measurement should be based on current project

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management maturity research which could contribute to solutions in respect of the profession's role in developing standards.

Research conducted by the University of the Free State, South Africa, has shown positive results in respect of professional mentoring aimed at small- and medium-sized construction contractors (Hauptfleisch, 2006). It is therefore hypothetically stated that a mentorship programme may play an important role in the continuing development of the quantity surveying profession. The success achieved with the above programme also suggests possible applicability of membership principles in respect of professions.

Conclusions and recommendations emphasise the need for education and training in the profession, supported by tools previously under- or not utilised adequately, in particular, maturity models and mentoring tools in the continuing professional development of quantity surveyors.

2. The quantity surveyor's perceived position

It is often held that the education of young people for the construction professions is not sufficiently effective and that a more practical approach is needed. The question may then be asked whether professions and firms are ready or mature in respect of developing the professions and young entrants. This was stated in debates at congresses and meetings at the 2007 Association of Schools of Construction of Southern Africa (ASOCSA) congress.

It seems reasonable to accept that while members of the profession are critical about the performance of academic institutions, the majority are themselves not paying due attention to their own development in a very competitive, constantly changing market. The question may then be asked whether professional maturity is at an acceptable level and do the members of the profession grasp the importance of their role in the development of the profession, its standards and training?

3. Maturity of a project-orientated nation, profession and enterprises

3.1 Maturity (level of development) of nations and professions

Fuessinger (2006: 3-4) proposes that the maturity of a project-orientated nation also includes the following additional project-management-related services:

- Project management education: Formal education programmes are provided;
- Project management research: Research projects, publications and events are typical activities, and
- Project management marketing: A national project management association (Fuessinger, 2006: 3-4) is in place.

Although the above services refer to project management orientation, they may equally be relevant to other construction professions. It is submitted that based on the above, the following elements should prevail in the development of a profession:

- Education: Understanding the knowledge, science and skills needed for the profession, using known technical, management and mentorship instruments;
- Research: This relates to the development of the profession as a learned society, and
- Association: An association of professionals with effective communication systems and instruments pursuing CPD.

Gruber (2004: CD-ROM) states that maturity implies growth over time as well as understanding why success occurs, and ways to correct or prevent problems.

The advantages for enterprises to be part of such an analysis are, according to Gruber (2004: CD-ROM), that they determine where they stand and can identify certain strengths and weaknesses in processes, implement certain methods for effective improvement, and set up improvement programmes. Enterprises may also be led by way of maturity identification to total product, marketing and service delivery improvement, using the principles of the project management maturity model.

3.2 A maturity model and dimensions

"A Maturity Model is a framework describing a process whereby something desirable can be developed or achieved"
(Gruber, 2004: CD-ROM).

It is proposed that a maturity model used to analyse the project management maturity of firms, companies and nations may assist the quantity surveying profession to understand the maturity of the profession, particularly in the domains of education, training and mentorship.

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Figure 1 illustrates an overview of project management maturity in South Africa, based on a research project conducted by the University of the Free State, in conjunction with the Wirtschaftsuniversität in Vienna in 2006. This overview of average maturities of respondent companies / firms in South Africa expresses the dimensions (elements) of maturity (levels of development) as percentages.

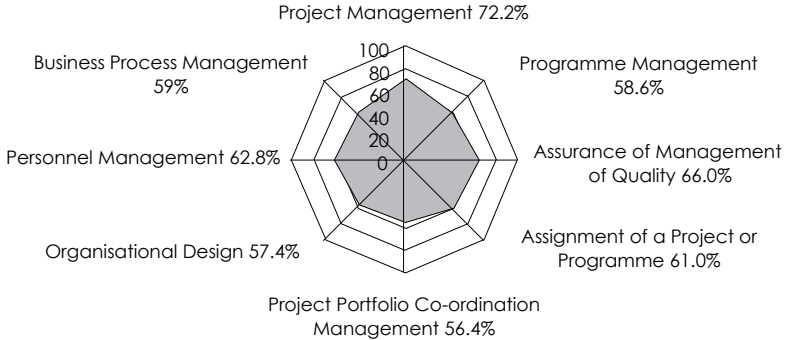


Figure 1: Average maturities of respondent companies / firms in South Africa
Source: (Project Management Group 2006)

The average maturity rating (score out of five) for the analysed project-orientated companies in South Africa is 3.12 (see Table 1) or 62.4%. These South African companies / firms show a high maturity ratio in project management with 3.61 points or 72.2%. Organisational design of the project-orientated company / firm shows the lowest results with 2.87 points or a 57.4% maturity ratio (Verster & Hauptfleisch, 2007).

Table 1 presents the average maturities of South Africa based on four project-orientated groups (POG) analysed. The sum of the four averages gives the average for the 21 project-orientated companies (POC) in South Africa. The maturity ratio of quantity surveyors as project managers is shown in column 4 at 58.6%.

Table 1: Average maturities of the South African Project-Orientated Groups (POG) (Table descriptions expanded on by the authors)

Maturity ratio: 5-point scale					
1	2	3	4	5	6
<i>Dimensions</i>	POG in South Africa	POG building & civil construction	POG QS consulting	POG engineering consulting	POG education, government & non-profit
Maturity Ratio Averages	3.12	3.37	2.93	3.35	2.82
Project Management	3.61	3.77	3.52	3.90	3.30
Programme Management	2.93	2.73	3.14	3.02	2.93
Assurance of Management Quality of a Project or Programme	3.30	3.71	2.98	3.25	3.12
Assignment of a Project or Programme	3.05	3.50	2.81	3.48	2.38
Project Portfolio Co-ordination and Networking Between Projects	2.82	3.07	2.80	3.24	2.29
Organisational Design of the Project-oriented Company	2.87	3.10	2.57	3.10	2.66
Personnel Management in the Project-oriented Company	3.14	3.51	2.60	3.29	2.95
Process Management in the Project-oriented Company	2.95	3.25	2.66	3.02	2.74

Source: (Oosthuizen Kotzé & Hauptfleisch 2007)

3.3 The importance of procurement as a dimension of maturity

In terms of the above project management research, the products delivered to the market by quantity surveyors may be identified as dimensions that could be weighed and then measured for maturity in order to establish benchmarks and development areas.

Procurement is discussed to illustrate the importance of this quantity surveying function, i.e. an important element of maturity. A quantity surveyor is expected to possess a high level of maturity related to procurement. In Table 2 the results from recent studies in the United

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Kingdom (UK) and South Africa (SA) show procurement preferences (QS to client or contractor).

Table 2: Comparison between procurement systems in the UK and SA

<i>Procurement and measurement method</i>	<i>UK %</i>	<i>SA %</i>
Measurement as part of procurement (% of project where used)	57%	84%
Approximate quantities where measurement is not carried out (% of project where this was done)	55%	56%
Method of measurement SMM 7 and SSM 6 (% where these systems were used)	77%	90%
Computer systems for bill production	67%	73%

Source: UFS 2004 RICS 2002

Some practitioners tend to emphasise the role of measurement skills, a very practical skill to new entrants. Table 2 shows the requirement for these skills in the market. The difference in the UK and SA responses is clear. It is observed that measuring skills are considered less important in the UK than in SA. However, procurement as a QS function is still preferred. The difference in preferences may help to understand the maturity rating of measurement as part of procurement.

3.4 Importance of communication instruments as a dimension of maturity

Instruments used by the quantity surveyor to communicate with clients may equally be relevant to maturity and may serve as examples to establish a maturity model for the profession.

Figure 2 shows the communication instruments that quantity surveyors normally use for projects in the construction industry. The importance of estimates, cost reports, final accounts and contract conditions documents as communication instruments were identified as positive. Estimates, cost reports and final accounts are viewed as important communication instruments for projects.

The cost plans, payment advice, and escalation costing presentation were also experienced in a positive manner. The importance of the standard system of measurement (SSM), preliminaries, preambles for trades, although highly rated, were considered by the respondents to

be least important. Figure 2 illustrates the most important instruments indicating what communication instruments may be most important in establishing the level of quantity surveying maturity.

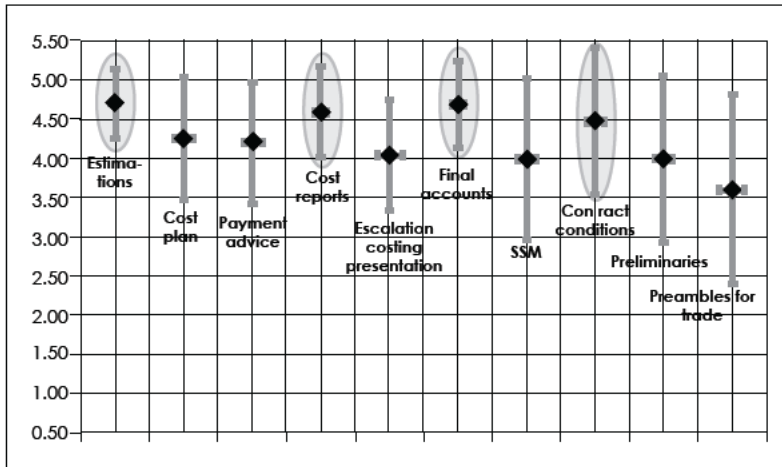


Figure 2: Importance of communication instruments used for projects by professional quantity surveyors in private practice.

Source: Berry Verster & Kotzé 2006

4. Training in the quantity surveying profession in pursuit of maturity and excellence

4.1 Identification of work for professional quantity surveyors

In terms of the *Quantity Surveying Profession Act 49 of 2000*, the South African Council for the Quantity Surveying Profession (SACQSP) has developed a draft of core functions of the quantity surveyor, published in 2002. This document highlighted the most important activities and functions inherent in delivering professional services:

- Cost advice and planning;
- Project procurement and documentation;
- Tendering and contractual relationships;
- Contract services;
- Specialist skills related to quantity surveying services;

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- Quantity surveying related to engineering services, and
- Building and construction/property development. This category includes construction management, project management, principal agency, project monitoring, quality inspections, and value management (SACQSP, 2002).

This document is now being revised to adhere to the requirements of the Council for the Built Environment (CBE) and to address the duplication or overlaps that may be evident between the various professions active under the authority of the CBE.

4.2 Skills clusters and competence

The SACQSP accepted an assessment criteria related to competence required for registration as a professional quantity surveyor. The skills clusters and competence requirements are:

- Cost advice and cost planning. This category includes preparing and using cost data, estimates, financial viability, comparative design studies, budgets and cost plans, whole life appraisals, turnover and cash flows, cost management and reporting, applying fee scales, and implementing conditions of engagement.
- Project procurement and documentation. This includes procurement, contract documentation, bid analysis, price determination, documentation for subcontractors, cost value statements, specifications and schedule of rates.
- Post contract services. This includes cost advice, final cost estimation, variation accounting, cost benefit analyses, alternative construction methods, recording and assessing records, report on on-site requirements, and cost management.
- Engineering. This includes earthworks, roads, sewerage and water facilities, plant, structural steelwork, process and manufacturing plant, transformers, cabling, communication systems, fire detection, heating, air-conditioning and ventilation, and installations (SACQSP, 2007a).

Figure 3 lists the functions, elements and maturity outcomes (dimensions) of a possible model with the expected services or outcomes which the Quantity Surveying profession believe it can offer the market (PAQS, 2003a). These outcomes are regarded as important elements of a maturity model although small differences

on the basic competencies at entry level that a quantity surveyor should possess by South Africa and by the Pacific Association of Quantity Surveyors (PAQS) are shown in Table 3.

Table 3: A comparison between the South African situation and the PAQS on the basic competencies at entry level that a quantity surveyor should possess.

<i>SOUTH AFRICA</i>	<i>PACIFIC ASSOCIATION</i>
Quantification	Quantification
Numeracy	Numeracy
Communication	Communication skills
Interdisciplinary and interpersonal teamwork	Personal and interpersonal skills
Commerce entrepreneurship and management	Business and management
Professional practice	Professional practice
Information technology	Construction technology
Technology	Construction technology
Law	Construction law and regulations
Research	

Source: (Verster 2004)

Comparative analysis, presented in Table 3, shows the most important services or expected outcomes of the profession. These could be interpreted in this instance as the technical and professional skills where maturity should be at an expert level. The profession is expected to provide ample development opportunities to its young people to become experts in respect of these services. The reason why the PAQS study is included is to show the similar view of the professions of different worlds regarding basic outcomes and competencies.

4.3 Continuing Professional Development (CPD)

Haupt (2003: 31) states that it is evident that all the co-operative partners, academics, students and employers need to narrow the gap between academic and experiential learning components.

Following from this statement one of the questions that needs to be asked is: what role do or should the profession and its members play in making quality training available to young people entering the profession?

The ASAQS implemented a CPD programme on behalf of the SACQSP as early as 1999 in an effort to develop the profession towards a dynamic pro-active learned society. The categories to achieve 200 points per five year cycle of development activities were:

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Category 1: Conferences, seminars, workshops.

Category 2: Small group activities, journal clubs, training sessions and committee work for the profession.

Category 3: Individual activities, self-study, lecturing.

For Category one, two points were allowed per one hour of activities to a minimum of 80 points over a period of five years, for the others only one point per hour was allowed.

The five-year cycle was later extended to the end of 2006 (SACQSP, 2006).

In 2006 a new system was introduced to be implemented as from 2007. A yearly cycle was introduced and registered. Professional Quantity Surveyors are now required to undertake 25 hours of CPD activities in one year. Only two categories of activities are now accepted:

Category 1: Fifteen hours minimum of formal external training (including research output, congresses), and

Category 2: Ten hours maximum of informal training and other acceptable activities (SACQSP, 2007b).

Guest (2007: 28), consultant to the Institute of Continuing Professional Development, believes that keeping up to date by means of continual learning should become a natural habit and that professional people have the duty to update their working knowledge.

The activities within the professions driven by the ASAQS and the SACQSP are pro-active and internationally relevant. The correct implementation of all the requirements and policies should lead to the development of the profession and its people to the highest possible level, a true learned society.

However, members of the profession and registered Quantity Surveyors do not seem to have a sufficiently high appreciation of the integrated education and development model currently being developed. The lack of CPD activities illustrates this unfortunate fact (Cruywagen, 2007: 99). It is accepted that CPD activities will be important in respect of firms or individual development to maturity.

5. Education in the quantity surveying profession in pursuit of maturity and excellence

5.1 Generating standards

Over the past four years the quantity surveying Standards Generating Body (SGB) has developed standards for the profession on both a full qualification basis and a comprehensive set of unit standards for all the relative quantity surveying qualification levels and outcomes. The unit standards are soon to be gazetted. Education providers will have to adhere to these standards within the next few years (SAQA, 2005-2007).

Table 4 shows a summary of exit level outcomes, critical evidence for assessment purposes and assessment criteria of the quantity surveying qualification at Honours degree level. Typically, a programme leading to awarding an Honours degree in Quantity Surveying aims to develop graduates who will possess demonstrable, specialised skills and competencies to:

- analyse and solve problems related to the built environment;
- deal with commercial, entrepreneurial and management issues;
- communicate effectively on all matters to which their skills and competencies have been applied;
- use and apply information technology;
- interpret and apply legal principles within the context of the built environment;
- execute tasks requiring numerical and quantification expertise;
- conduct research within the context of the built environment, including consideration of interdisciplinary aspects, and
- apply knowledge of technology within the context of the built environment (SAQA, 2005-2007)

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Table 4: Outcomes, evidence and assessment of quantity surveying qualifications level 7

Honours degree in Quantity Surveying Qualifying learners are competent to:	Critical evidence for assessment purposes Analysis and problem-solving	Assessment criteria
<ul style="list-style-type: none"> • Demonstrate familiarity with and display knowledge and understanding of the quantity surveying practice and procedure • Well-rounded knowledge and an ability to critically question core theory practice and methodology • Competence in modes of inquiry employed in practice disciplines • Analyse and locate the principles and perform own work within current practice 	<ul style="list-style-type: none"> • Create and innovate systems of identification assessment • Formulation and solving of convergent and divergent problems • Assess the impact risks and benefits of design proposals • Exercise judgment • Perform management tasks • Alternative solutions to problems or queries • Apply techniques and principles of quantity surveying analysis financial management and risk management 	<ul style="list-style-type: none"> • Clear identification • Planning approaches • Choice of optimal solution • Division of tasks • Prioritisation • Logical structures • Establishment of reasons • Co-operation • Identification evaluation and reporting • Planning and managing project and construction processes • Performing management tasks including analyses • Exercising judgement • Communicating project development
	<p>Commerce, entrepreneurship and management</p>	
	<ul style="list-style-type: none"> • Understand management skills • Cost-effective use of appropriate resources • Quality control and health and safety • Client needs • Understand environmental social and community issues • Accounting • Budgets and cash flows 	
	<p>Economics</p> <ul style="list-style-type: none"> • Application of economics concepts and principles 	

Source: (SAQA 2005-2007)

The descriptions in Table 5, relating to quantity surveying, comply with the National Qualifications Framework (NQF) where ladders of opportunity are provided for learners to progress (within their

capabilities) from the lowest to the highest levels of competence. It also facilitates recognition of prior learning (RPL) in that it allows learners entry at various levels. In addition, it consistently ignores the work environment of the learner.

Table 5: Descriptions Level 7 for Quantity Surveying

Level 7	Learners are required to demonstrate competence in the application of advanced quantity surveying expertise (theory and practice) related to the built environment. Graduates work under the guidance of a Professional Quantity Surveyor.
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Note: These level descriptors were developed during the QS SGB Scoping Exercise held on 15th October 2004 which was approved by the SACQSP in October 2006.

5.2 Accreditation policy

The accreditation policy document was accepted at the SACQSP meeting of 23 March 2007. Education providers will have to adhere to this document for future accreditation. Although the policy is not regarded as a guillotine to cut providers off, the seriousness of quality education and training provision is accepted. The policy document, submitted to the SACQSP by the Education Standards and Research Committee, based the policy on the following criteria for Honours levels:

- Entry requirements level at 17 unweighted matric points where a higher grade A symbol constitutes 5 points and an E symbol 1 point. (Standard grade at -1 in each instance);
- Research output should be at a publication output of 8 per permanent staff member per year;
- Senior lecturer equivalent (SLE) to full-time student equivalent (FTE) should not be more than 1:40 (SACQSP, 2007a) ;
- Employability of graduates, and
- Qualification levels of full-time academic staff - 75% at Masters level or higher (RICS, 2005; SACQSP, 2007a).

The policy document is aligned with the accreditation policy of the Royal Institution of Chartered Surveyors (RICS) and the Pacific Association of Quantity Surveyors (PAQS) accreditation policy documentation (RICS, 2005; RICS, 2007; PAQS, 2003b).

Apart from the above, education providers must adhere to the 19 criteria for accreditation by the SACQSP (SACQSP, 2007b).

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The above illustrates international tendencies to improve standards of research, education, training and services to the profession.

5.3 Research

Research is viewed as one of the most important determinants and dimensions of the maturity of a profession and a nation.

The Education Standards and Research Committee of the SACQSP submitted a research facilitation plan to the SACQSP in 2006. This plan was accepted at the Council's meeting in October 2006.

The aim of the SACQSP is to promote research as a pro-active dynamic and interactive process to ensure that the profession remains in the vanguard of its business and knowledge environment. To this end the South African accredited journal *Acta Structilia*, published by the University of the Free State, is endorsed by the Council to promote research.

The main strategy is therefore to establish a firm research focus for development of the profession and the mission is to achieve the strategy through a research journal, an interactive seminar or mini-congress series, and by commissioning research projects. Ultimately, this will establish a strong development focus in the profession (SACQSP, 2006).

6. Mentorship in the quantity surveying profession in pursuit of maturity and excellence

From the above overview, which describes various interventions to uphold and promote improvement in standards regarding education in quantity surveying, it is noteworthy that experiential training, supported by active mentoring, is not emphasised adequately. As with other professions such as medicine, accounting, engineering, and law, it is an obvious imperative that the scientific use of mentoring in developing a learned quantity surveying profession should be mandatory.

The generally accepted meaning of mentorship is that it is a process of transferring knowledge and skill. Typically this entails that an older knowledgeable person imparts knowledge and skills to a younger *protégé*. In a developed world environment this typically takes place in a closed environment such as a specific enterprise, family structure or other organised endeavour.

Over the past five years the University of the Free State has achieved success with its mentorship programme for small- and medium-sized construction contractors. This mentorship programme resulted from concerns of the financial sector regarding security when lending into the emerging market. Government initiatives and legislation to create an enabling environment post-1994 for previously disadvantaged individuals (PDIs) made construction contracting opportunities available to PDIs.

The main challenge that faced both the financial sector and government agencies was how to provide support to the development of the PDIs as so-called emerging contractors. Mentorship was identified as an important component of such support. A comprehensive Integrated Emerging Construction Development Model (IECDM) was structured and introduced as a development programme. The important aspect of identifying suitable mentors was addressed by the establishment of an accreditation programme, currently located at the University of the Free State. In essence, recognition of prior learning and psychometric evaluation of prospective mentors developed.

The identification and creation of an accreditation programme for construction mentors in South Africa is believed to be the first attempt of its kind in the world. In a joint survey undertaken for a statutory body, the panel could not uncover a similar initiative anywhere else in the world. Mentorship in other forms is common, but none could be found that reflected a specific intervention to support small independent construction contractors, who operate for their own account. In this context, mentoring has grown into a complex professional support service, growing towards coaching and a business advisory intervention.

Without a weighted analysis having been done, several categories of mentorship are recognisable:

- Category a: mentorship in a closed working environment;
- Category b: as interventions by organs of state and academic institutions to establish support structures, and
- Category c: as a paid professional service, mainly in category (b).

It is clear that mentoring generally takes place or should take place in a structured and controlled environment. Although it is common that mentoring in category (a) tends to be less formal, it is still significant, if taken seriously.

When considering categories (a), (b) and (c) above, it seems logical that young people undergoing a professional learnership / article period during formal professional, or on completion of education, fall into category (a). The problem at hand is to structure mentoring for young professional trainees in such a way that it becomes a reliable development tool, operating from a consistent platform in professional practices where young quantity surveyors are mentored. It seems logical that, while a period of practical experience is a pre-requisite to register as a professional practitioner, the practical experience should be structured as a measurable, mentoring programme.

The question that arises is to what extent senior practising quantity surveyors are capable of providing young people with state-of-the-art mentoring, if they themselves do not meet their own profession's CPD requirements.

Wilkinson (2004: 9-10) states that supervisors and counsellors of Assessment of Professional Competence (APC) candidates are in a role of advice and support but also assess the candidate's competence. However, they are not expected to train. The RICS regards the supervisor as a person with day-to-day responsibility for a candidate's knowledge of his/her work, and the counsellor as a person with a more strategic role, as two persons. The South African situation may present difficulties for firms to find two people for the above roles. The RICS, however, also allows for the fact that smaller firms cannot always appoint two people (Wilkinson, 2004: 10).

Wilkinson (2004: 10-11) stipulates the following duties of the supervisor or counsellor:

- Ensure that the candidate receives training in line with the competency requirements;
- Sign off the candidate at three-monthly and six-monthly intervals, and at the interim and final assessment stages;
- Ensure that all records and reviews are completed accurately;
- Assist the candidate with the preparation and submission of documents for the final assessment;
- Liaise regularly with the supervisor / counsellor, and
- Provide support and encouragement.

He further reminds supervisors and / or counsellors that they are required to maintain high levels of involvement: "You will not simply be 'dipping in and out' of the process" (Wilkinson, 2004: 11).

The question remains: Are supervisors or counsellors in the UK or in South Africa actually performing the duties as they should and do young people receive the due attention they deserve or should receive? It may be prudent to consider that a structured mentorship programme that addresses proactive development towards maturity should be introduced for the profession in South Africa and perhaps internationally.

7. Conclusion

For the growth of a professional society and for such a society to be world class and a real learned society, research, education, training and professional development are fundamental elements to future survival, development and prosperity. It is proposed that the Quantity Surveying profession in South Africa is becoming a proactive learned society. This is evident from the numerous activities, documentation, policies and structures implemented by the official institutions and associations of the professions, on behalf of the profession and the public that use its services.

However, it is equally evident that many members of the profession are not sensitive or active enough in building the profession's knowledge, skills and attitudes towards development and growth. CPD activities clearly show this unfortunate tendency. Professional maturity models can assist with the establishment of benchmarks, prompting professional practitioners to concentrate on their particular maturity dimensions that require enhancement. In this regard CPD can make an important contribution. An integrated research, education, training and development process is needed to achieve the goals of the profession. A model which includes education, training, mentorship and CPD may assist in bridging the gap between the providers of formal education and the providers of the quantity surveying services to clients towards professional maturity. Such a model is diagrammatically presented in Figure 3.

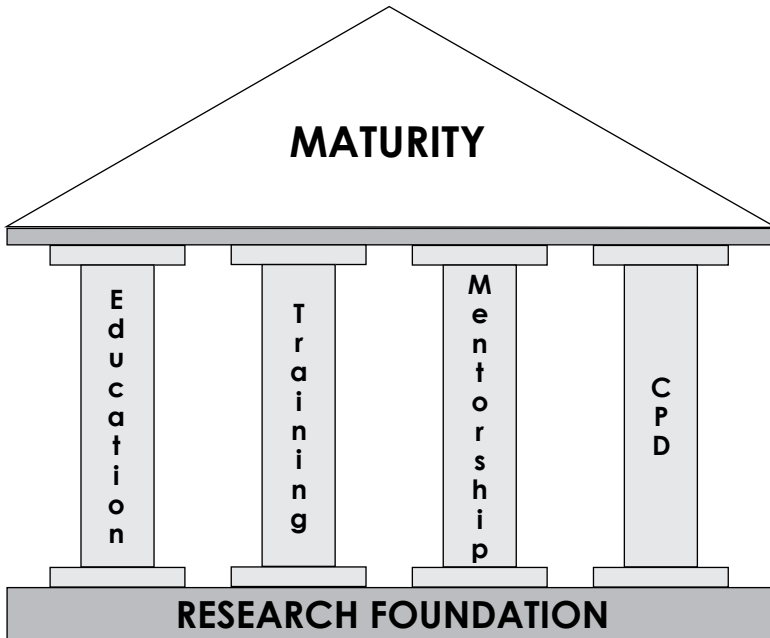


Figure 3: Education training mentorship and CPD model to achieve quantity surveying professional maturity

It is recognised that the candidateship system of the SACQSP goes a long way in assisting newly qualified entrants into the profession. The position is held that training the trainers and a mentorship approach will further enhance the development of new entrants and promote the continuing development of all professionals. However, until a professional quantity surveying maturity model is introduced, it will remain difficult to establish scientifically whether all the proposed objectives (dimensions of maturity) have been achieved.

8. Recommendations

Maturity levels of the profession need to be established in respect of the total integrated development of the profession and its people in terms of all the dimensions typical of a mature profession.

The following elements or dimensions should be included in an integrated system:

- Pursue sustained communication with the profession regarding standards and education;

- Educate the profession in respect of CPD and its role;
- Train and develop mentors;
- Render continuing support to develop knowledge by means of research;
- Design, develop and integrate a mentorship system as part of the total development activity that also adheres to all the principles laid down in the policy documents;
- Establish the maturity levels of role-players first and then those of the profession;
- Establish stronger links between education institutions and the profession, and
- Communicate to the profession what the role of education providers is and what the role of training and membership entails.

For the Quantity Surveying profession in South Africa to continue to grow / develop towards a pro-active learned society it is proposed that identified important aspects of education, training and mentorship in pursuit of maturity be addressed by professionals in the industry.

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