

Certainly no single means of assessing students for entry into architecture programmes is 100% reliable; as such a combination of different assessment criteria is desirable. (Olweny 2008:5)

CHAPTER 4 SELECTION INTO SCHOOLS OF ARCHITECTURE IN SOUTH AFRICA

4.1. SUBPROBLEM 2

In order to understand the context of the main problem we need to determine and critically investigate the admission procedures and assessment tools for the selection of beginner students into schools of architecture in South Africa.

4.2. SUPPOSITION TO SUBPROBLEM 2

The supposition to subproblem two is that schools of architecture in South Africa use admission procedures and assessment tools for the selection of beginner students that are similar to those used by schools of architecture worldwide.

4.3. OUTLINE OF CHAPTER 4

In this chapter the practice of selection into schools of architecture in South Africa is investigated. Due to a lack of available information on the subject a national survey was conducted to clarify how, and by means of which assessment tools, local schools of architecture select beginner students for admission. The results are analysed in order to establish a framework of local practice. The discussion is ordered from the most-used assessment tool to that least-used, while comparing these with other international practices of selection, as has been set out in Chapter 3. This serves to contextualise local practice and provides the background to tendencies, concerns or items of specific local interest.

4.4. OVERVIEW OF THE RELATED LITERATURE

The research presented in this chapter is informed by, and organised according to, the eight categories of assessment tools identified and published by Goldschmidt et al (2001) and elaborated on in Salama (2015:86). These sources, discussed in Chapter 3, serve as the basis for a substantial portion of the survey that informed the contents of this chapter. Other sources include those of the case studies that were discussed in Chapter 3, especially the research by the AERU at the Bartlett School of Architecture as described by Abercrombie et al (1969). The article *Knocking at the practitioner's door: Job shadowing and the threshold to the architectural professions* (Botes 2015) informed the addition of a ninth assessment tool in the local survey. Lastly the opinions of the ten respondents who participated in the South African survey on behalf of schools of architecture served as primary sources for this chapter.

4.5. SOUTH AFRICAN SURVEY

The cumulative data of the international surveys discussed in Chapter 3 indicate that only two schools from South Africa were listed as respondents (Salama 2015:86). This number represents about 18% of local schools and can therefore not be considered as representative of local selection practices. In addition it has been shown that there is a scarcity of relevant local research and literature on the subject of student selection for admission to programmes in architecture. This served as motivation for the investigation of selection practices at South African schools of architecture through a national survey.

4.5.1. Purpose of the survey

The purpose of the survey was to collect data on the admission procedures and assessment tools used by schools of architecture in South Africa in their selection of beginner students for the 2016 academic year.

4.5.2. Survey methodology

During the last quarter of 2016 a questionnaire was circulated electronically to all schools that, in 2016, presented validated programmes in architecture and architectural technology at public institutions of higher learning in South Africa – see Table 2.3 – in order to obtain permission for participation in a national survey. After written permission was obtained from the relevant heads of department, directors or academic leaders, the questionnaire with supporting documentation was submitted for approval to the Committee for Research Ethics and Integrity at the Faculty of Engineering, Built Environment and Information Technology at UP. Approval was granted in December 2016 (see Appendix 1) and during January 2017 the questionnaire (see Appendix 2) was circulated by e-mail to the ten schools with an invitation to participate in the survey. Responses were received by e-mail to the researcher during the first four months of 2017; respondents provided the researcher with a signed form of informed consent that confirmed their voluntary participation in the survey.

4.5.3. Survey structure

The questionnaire consisted of three main parts: the first (Section 0) dealt with the essential information related to the process of selection, including a brief overview of the procedures followed for the intake of 2016. The second part (Sections 1 to 10) asked respondents to indicate which assessment tools they used and how each contributed to their assessment of an application. This portion was based on the findings of Goldschmidt et al (2001) and included the eight assessment tools identified in their research as adjusted, adapted and augmented for the South African context. A ninth tool – workplace experience – was added to the survey based on the research published in Botes (2015:39-46). Comments were invited on each tool used by an institution. The third part (Sections 11 to 13) requested general information, such as intake numbers (where these were available) and asked for comments on the selectors' perceptions and possibilities for improvement of the procedures followed.

4.5.4. Delimitations and assumptions

The survey investigated the general admission procedures and specific assessment tools used by local schools of architecture for the selection of beginner students for the intake of the 2016 academic year. Advanced students, such as those undertaking postgraduate studies and those applicants undergoing RPL procedures were therefore excluded from the survey.

The survey made provision for respondents who present programmes with degree outcomes at NQF level 7 and those with diploma outcomes at NQF level 6. Respondents that present programmes with both outcomes were requested to clarify whether the selection procedure for these intakes were principally similar, or alternatively were asked to complete separate questionnaires for each academic programme.

The replies from respondents were taken at face value for their apparent meaning and as respondents were personally involved in, or responsible for, selection at the institutions they represented, it was reasonably assumed that they accurately reflected the stance of the institution they represented. This motivates the use of the term 'respondent' to replace the tedious 'respondent institution'. This point is more salient as all of the schools of architecture in South Africa that presented validated programmes in 2016 responded to the invitation to participate in the survey.

In keeping with the requirements for research ethics and integrity, respondent institutions (hereafter respondents) are not identified and the institutions have therefore been randomly allocated a number for the purpose of collating and summarising the data. For the same reason opinions from the questionnaire are quoted anonymously in the subsequent discussion of the survey findings.

4.6. SURVEY FINDINGS

4.6.1. General findings

The first finding of the survey is that all ten of the respondents in South Africa used selection to determine which beginner students were admitted to their programmes in the 2016 academic year. The second finding is that the respondents, on average, used a combination of 4.2 out of nine possible assessment tools for selection. This average is significantly higher than the average combination of 2.44 assessment tools used by schools of architecture internationally, according to the data in Salama (2015:86). The number of assessment tools used by a respondent ranged from three (for three respondents), four (for three respondents), five (for three respondents) to six (for one respondent).

Findings in respect of the assessment tools used by respondents for their respective selection procedures are summarised in Table 4.1 and the subsequent discussion.

TABLE 4.1: Assessment tools used by schools of architecture in South Africa for selecting beginner students in 2016

	Academic records	Portfolios	Personal statements	Interviews	Special architecture tests	Workplace experience #	Written arguments and literacy	Generic aptitude tests	Letters of recommendation	● TOTAL PER RESPONDENT
Respondent 1	●	●	●	●						4
Respondent 2	●	●	●					●		4
Respondent 3	●	●		●		●		●		5
Respondent 4	●	●	●							3
Respondent 5	●	●		●		●	●			5
Respondent 6	●	●	●			●		●		5
Respondent 7	●				●		●			3
Respondent 8	●	●		●	●	●	●			6
Respondent 9	●				●		●			3
Respondent 10	●	●	●		●					4
RESPONDENTS' TOTALS	10	8	5	4	4	4	4	3	0	
University of Pretoria	●	●	●	●	●	●	●	○		7
SOUTH AFRICAN TOTALS	11	9	6	5	5	5	5	3	0	

KEY: ● indicates an assessment tool considered during selection

○ indicates an assessment tool not considered as a rule during selection. It was therefore not included when totals were calculated

indicates an assessment tool not included in the international surveys

It should be noted that the assessment tools used by the Department of Architecture at UP are indicated separately in Table 4.1, but will only be critically analysed in Chapter 6 and are therefore not included in the discussion of the survey findings that follows. For this reason UP was not formally considered to be a respondent.

4.6.2. Admission procedures

From the reaction of respondents that commented on the procedure followed for admission at their institution, it appears that, as a general rule, applications from prospective students were received and centrally processed at these institutions through their administrative processes. These processes were criticised by some respondents – see section 4.6.14 later in this chapter. Applications were then forwarded to the schools of architecture for selection purposes, but in some instances aspects such as academic rankings and demographic information pertaining to an applicant were by then already assessed through administrative processes that did not necessarily involve academic staff. During the selection process a combination of assessment tools were utilised to determine a ranking or to differentiate between successful and unsuccessful applicants; this process was, in many cases, phased over time and rounds of elimination. The ensuing discussion of assessment tools, based on the survey results, provides an overview of these processes.

4.6.3. Academic record

Data from the two international surveys reported on in Salama (2015:86) indicated that an applicant's high school record was by far the most widely used selection tool among 118 schools of architecture worldwide. Despite its popularity Goldschmidt et al (2001:284-286) record that there was little consensus among respondents on the merit of this assessment tool and that practices in its appraisal varied considerably – see Chapter 3.7.1.

The following analysis relates to Section 1 of the South African survey – see Appendix 2. Respondents were asked if the academic records of applicants were considered during selection for the 2016 academic year. Respondents who indicated that they did use it were asked to provide more detail, including the minimum academic requirements that applicants had to meet, if and how an applicant's academic record was weighted in selection and whether it was considered to be a useful selection tool. Respondents were asked to motivate their opinions.

All of the ten respondents used an applicant's academic record and NSC results for selection purposes. This is not surprising in light of the statutory standing of the NSC and the fact that, in principle, it determines access to higher education in South Africa. The Department of Basic Education (2017) in addition states that the NSC examinations have “[...] become an annual event of major public significance. It not only signifies the culmination of twelve years of formal schooling but the NSC examinations is a barometer of the health of the education system”. A learner's NSC results also act as

the basis for admission to studies with higher certificate, diploma¹ and bachelor's degree² outcomes (Umalusi 2013).

All ten respondents considered an applicant's results for Grade 12, which is also the NSC results, while eight indicated that they also considered results for Grade 11, the penultimate year of high school in South Africa. Results for the end of the Grade 11 academic year are usually presented when applicants are still in the process of completing their matric at the time when they have to apply for admission to higher education institutions. Eight respondents indicated that the academic record was converted to an average expressed as an Admission Point Score. The formulae for calculating these scores do vary between local institutions (Blignaut & Venter 2011:217-218) and are therefore not always comparable at face value. Seven respondents indicated that they considered results from other tertiary studies if these were available and three indicated that they made exceptions to the minimum requirements for applicants who did not complete their matric in South Africa³ and for older or transfer students.

Nine of the ten respondents required applicants to have passed Mathematics for the NSC, with the minimum achievement rating required for this subject ranging from 40% to 60%, which differs from the pass requirement of 50% at tertiary education level. The respondents who presented degree programmes required a minimum of either 50% or 60% in this subject. One respondent motivated this requirement by stating that good marks in Mathematics were indicative of a capacity for problem solving.

In South Africa matriculants are required to study two official languages in order to obtain the NSC. One of these must be at home language level in which at least 40% should be obtained, while the other can be at home, thus first, or first additional language level (Department of Basic Education 2017). One of these language subjects must be the language of learning and teaching at the school that the learner attends (Umalusi 2013:14). Eight of the respondents prescribed a minimum mark for language, of which three accepted the minimum of 40%, while four required at least 50% and one 60% or more. Five respondents specified English as a compulsory subject, with two referencing English as the medium of instruction at their institutions. It does however seem that all of the respondent schools use English as the de facto medium of instruction in any case. Two institutions also set minimum expectations in the second language.

1 For Diploma studies "The minimum admission requirement is the National Senior Certificate with a minimum of 30% in the language of learning and teaching of the higher education institution as certified by Umalusi, the Quality Assurance Council, coupled with an achievement rating of 3 (moderate achievement, 40% - 49%) or better in four (4) recognised 20-credit subjects listed from the designated list. Institution and programme needs may require additional combinations of recognised NSC subjects and levels of achievement." (Department of Basic Education 2017)

2 "To meet the minimum admission requirements to a Bachelor's Degree study at a higher education institution, a candidate must obtain, apart from the National Senior Certificate, an achievement rating of 4 (Adequate Achievement, 50% - 59%) or better in four (4) designated subjects: Accounting, Information Technology, Agricultural Sciences, Languages, Business Studies, Life Sciences, Consumer Studies, Mathematics, Dramatic Arts, Mathematical Literacy, Economics, Music, Engineering Graphics and Design, Physical Sciences, Geography, Religion Studies, History, Visual Arts." (Department of Basic Education 2017)

3 Foreign school leavers are required to obtain exemption for purposes of admission to higher learning institutions in South Africa. The Matriculation Board, an advisory body to Universities South Africa, performs the assessment of academic records for this purpose (Matriculation Board 2017).

Differences were recorded for the weighting of the academic record for the purposes of selection. Four respondents indicated that an applicant's academic record was considered, but not formally weighted with other assessment tools. Three respondents considered this as having equal importance as other assessment tools and only two institutions indicated that academic records played a more significant part than other considerations. One of these respondents opined that the academic record was "[...] most likely the only fair way to accept or deny entry to an applicant on an equitable basis" and added: "An academic record with good performance in languages normally indicates a potentially strong student". One respondent stated that a good academic record was a fair indicator of a student's readiness to undertake studies at an institution of higher education. It was shown in Chapter 3.7.1 that this is a generally held view, but also that this perception is often based on its general accessibility and the fact that school results are widely accepted and understood by society at large.

One respondent considered academic results less important than other factors. Two respondents indicated that an applicant's academic record was augmented with the results of their NBT. The NBT are discussed in the ensuing section of this chapter that deals with generic aptitude tests.

A clear indication was obtained of the respondents' views on how useful academic records are perceived to be for the purposes of selection. Three respondents viewed the academic record as useful, while the other seven thought that it merely had some value. One of them suggested that a good academic record indicated that a student could work hard, but also that it did not indicate creative ability. Another thought that the academic record failed to indicate spatial understanding. It was also highlighted that feeder schools differ substantially and that applicants with good potential may not have had access to good schooling.

For some respondents the role of the academic record in the process of selection was considered more of a procedural matter than being the assessment tool of preference – two respondents viewed the academic record simply as a threshold requirement for further selection through other assessment tools. One respondent explicitly dismissed the value of the academic record for selection as it was found that school results are too unpredictable to be a reliable measure of applicants' interest in the world around them. It was also stated that it failed to measure "maturity, perseverance, enthusiasm for architecture and an ability to develop a sense of aesthetic and appreciation of beauty". The respondent also spelled out that:

School results are indicative of a good memory, possibly a good sense of interpreting questions, good teachers that know how to prepare students for exams, and some discipline. Although some of these are useful and necessary skills in the studying of and operating within the profession of architecture, it is indicative only.

[...]

In many instances, for a number of reasons, candidates' scholastic results may not be a true reflection of their abilities, and thus not indicative of their inherent intelligence, creativity or ability to become very good students and architects. This is especially true of students from regions or areas with poor school systems.

This opinion highlights the fact that the legacy of South Africa's political history, and its influence on education, continues to impact negatively on the performance, in particular that of disadvantaged school leavers. It also reminds us that applicants who come from poor communities and under-resourced schools are most likely to be disadvantaged in their academic preparation for tertiary studies, especially in the design disciplines (Saidi & Nazier 2011:185).

It was clear from the survey that academic records were considered jointly with other assessment tools. It is thus deduced that, although this tool provides selectors with some insight into the applicant's abilities, for prospective students of architecture it was not perceived to be the comprehensive benchmark some would have liked it to be. When weighted with other assessment tools that reveal information about applicants beyond the marks or averages they achieved, it principally follows the approach of the AERU who weighted the assessment of academic records with biographical and socio-economic factors at the Bartlett during the 1960s – see Chapter 3.6.3 and Abercrombie et al (1969:17).

It is thus concluded that an applicant's academic record, specifically for the NSC, was used for selection by all local schools of architecture for the 2016 intake. Nine institutions required Mathematics as a school subject and eight of the ten respondents specified minimum achievement ratings for language subjects, with half of all respondents doing so for English. The weighting of the academic record with other tools was disparate; at least four different approaches were recorded. This correlates with some of the findings of the international surveys (Goldschmidt et al 2001:284-286). The local data suggests that the majority of respondents thought that school results had some value as an assessment tool, but that it offered limited insight into an applicant's creative and spatial abilities.

4.6.4. Portfolios

The role of portfolios in architectural practice and education was discussed in Chapter 3.7.3. In the Beaux-Arts system portfolios were used in combination with special architecture tests for entry competitions and portfolio reviews continue to serve as prominent means of assessment for promotion at most schools of architecture. Data from the international surveys indicate that it was the third most popular assessment tool among international schools of architecture – see Table 3.1 – but also that it was used by less than a third of 118 respondents. Goldschmidt et al (2001:283) conclude that portfolios are always weighted with other assessment tools and often presented and discussed at interviews.

The following analysis relates to Section 5 of the local survey. Respondents were asked if portfolios were considered during selection for the 2016 academic year. Those who indicated that they did require portfolios were asked to provide more information, including a description of the portfolio requirements, its features, if format and media were prescribed and how the content was assessed and weighted. Opinions were invited as to how useful portfolios were perceived to be as selection tools.

All but two of the ten respondents required applicants to submit portfolios; accordingly it was the second most used assessment tool among South African schools of architecture. The survey showed that it was generally required that applicants prepare specific content for the portfolios – all of the eight respondents who required portfolios prescribed its content, while two respondents also allowed open portfolios prepared at the applicant's own discretion. The prescribed content featured up to six tasks that included varied combinations of drawings, design tasks, written assessments, model building or object making and problem-solving tasks. A respondent indicated that their brief for the portfolio required of applicants to interpret written instructions in order to develop a design solution to a three-dimensional problem; the solution had to be presented graphically and the conceptual thinking explained textually.

The international surveys clearly found that schools of architecture have different expectations of a portfolio submission. Two subcategories of portfolios were outlined in the survey in order to establish the agendas of local schools of architecture: showcase portfolios, where the outcomes represent a selection of the best work by an applicant, and revelatory portfolios, that may be revealing of an applicant's latent or patent abilities. The intention was to let respondents distinguish between the type of portfolio they require and to consider the crucial difference between one that is foremost considered for its final outcomes, as opposed to the type of portfolio that may be reviewed for the thinking and processes of production the applicant engaged with. The majority of institutions assessed portfolios as revelatory, while one institution purely assessed it as a showcase portfolio that represented the applicant's best work. Another respondent thought that both categories applied to their selection processes.

Five institutions weighted portfolios as being equally important as other assessment tools, while two considered it more significant than other tools and one only considered it, but did not formally allocate a weighting during assessment.

Four respondents indicated that applicants presented their portfolios during selection interviews. By implication the other four respondents who required portfolios only expected it to be submitted. One institution indicated that interviews were previously used to present portfolios, but that it could not be done for the 2016 intake due to the limited availability of resources. Nonetheless it was stated that a portfolio should "[...] ideally be viewed at an interview to verify authenticity and validate thinking [and] reasoning". One respondent, who proved to be the least keen on portfolios, reported that the institution "[...] cannot guarantee authorship and students don't respond to what is requested of them [...]". A respondent who did not use portfolios for selection supported this opinion and stated:

Considering the fact that there is no guarantee that the work in the portfolio was fully or partly produced by the candidate, together with the logistics involved in assessing a large number of applications, negates the extra insight that might be gained over and above what can be learnt from a comprehensive assessment under controlled conditions.

Another opinion, from an institution that invited open portfolios, stated that the portfolio assessment might be skewed by what applicants think is required and added: "Less privileged applicants see technical

drawings as superior examples of ability and leave innovative wire cars or sketches at home, and others cannot transport what they have, so it cannot count absolutely.”

A portfolio is time-consuming, not only for the applicant who prepares it, but also for the selectors who have to adjudicate its content. One respondent warned against dividing the assessment of portfolio tasks among individual members of staff as it might compromise holistic appraisal and thereby prejudice applicants. Another respondent required that the portfolio covers should also be designed to reflect the applicant and his or her approach to design.

Six of the eight respondents were sure that portfolios had significant value as useful selection tools, while one thought it had some value. The eighth respondent, who was quoted above, and was less convinced of its contribution for the frustration it caused. Almost all of the respondents particularly mentioned that creative ability was assessed through an applicant’s portfolio. “The portfolio can show an applicant’s aptitude and patent and latent capacity for drawing, design, creative thinking, visual literacy, conceptual thinking and abstract thinking.” Respondents also assessed portfolios to measure skills in problem solving, as an indication of the applicant’s curiosity and his or her level of motivation through the effort taken with the portfolio tasks. In addition it was opined that portfolio submissions possibly revealed core design thinking skills; this respondent thought that prescribing basic media was relevant for epistemological reasons and stated that portfolios should be designed to test thinking, rather than training.

In summary portfolios were the second most used assessment tools for selection at schools of architecture in South Africa for the 2016 academic year. They were used to augment other assessment tools in order to gauge a variety of skills and abilities that are pertinent to the architectural disciplines, including creativity, skills in visual literacy and design thinking. These aspects may not be easily revealed without outputs that are specifically intended for this purpose. The authenticity of authorship of the portfolio contents was a concern and it seems that the perceived validity of portfolio submissions increased when there was an opportunity to confirm authorship or to probe an applicant’s thinking about the portfolio contents in some way. It is also clear that portfolio requirements need to be carefully designed and considered so as to ensure its relevance and to allow for appropriate assessment of applicants’ abilities, whether latent or patent.

4.6.5. Personal statements

It was shown in Chapter 3.6.3 that a personal statement by candidates who applied for admission to the Bartlett School of Architecture in the 1960s correlated significantly with the later performance of selected students (Abercrombie et al 1969:127). The personal statement included biographical information, but most importantly in it applicants motivated why they wanted to pursue studies in architecture. The cumulative data from the international surveys documented in Salama (2015:86) indicate that personal statements are the least used assessment tools – only 6.8% of respondents stated that they considered

such statements. Goldschmidt et al (2001:287) indicate that the assessment of personal statements is more concerned with an applicant's motivation and personal goals than with their writing and language skills, which are more relevant in the section that discusses written arguments and literacy that follows.

The following analysis relates to Section 6 of the South African survey. Respondents were asked if personal statements in textual format, or essays by applicants that explained why they wished to study architecture, were considered during selection for the admission of beginner students for the 2016 academic year. Those who indicated that they did consider such statements were asked to provide more information, including a description of the requirement and how it was assessed and weighted. Opinions were invited as to how useful personal statements were as selection tools.

Considering the limited application of this tool in the international surveys, it was surprising that half of the South African institutions indicated that they considered personal statements for selection. Four of the five institutions considered them as letters of motivation that also served as an indicator of the applicant's understanding of architecture. One respondent motivated this as follows:

The 'Letter of Motivation' is a good method to understand who the applicant is, what their interests are, and what understandings they have of Architecture. It is an opportunity for applicants to include [...] more information that might not be apparent in their portfolios.

Three other responses noted similar opinions. One indicated that the personal statement was strategically used to start the discussion during selection interviews. Another respondent mentioned that applicants often wrote about buildings or sites that they had visited or with which they been impressed. This was viewed in a positive light as it indicated a long-term and active interest in architecture. One respondent additionally read the personal statement as an indication of language proficiency. This aspect overlaps with the purpose of essays, written arguments and literacy assessments that are discussed in a subsequent section of this chapter.

Personal statements received less weighting than most of the other tools probed in the survey. The opinions that were submitted suggest that its main purpose was to assist selectors in accessing (as opposed to assessing) applications, the contexts to which applicants relate and their frames of reference. Two respondents indicated that personal statements were considered, but not formally weighted and two indicated that it was less significantly weighted than other assessment tools. Three respondents thought that it had little value as an assessment tool for selection. One of these respondents commented that the personal statements were often rather naïve and repetitive. Another thought that personal statements had some value and one thought that it had significant value in selection.

It is clear that the value of a personal statement during selection relates to the individual who wrote it and his or her motives for applying for admission. It serves to contextualise applications and may assist in determining the extent of the applicant's frame of reference. It may also serve to indicate an active

interest in the discipline. In this sense it was found that a personal statement supports an application more than it decides its success.

The following four assessment tools – interviews, special architecture tests, workplace experience, and written arguments and literacy – were equally popular and all used by four of the survey's respondents. They are therefore listed alphabetically in the ensuing discussion.

4.6.6. Interviews

The AERU at the Bartlett School of Architecture experimented with different formats for selection interviews and found that it did not produce significantly measurable results (Abercrombie et al 1969:19-25). Nonetheless they used the platform to present portfolios and as an opportunity for applicants to visit the school and get acquainted with aspects thereof (Abercrombie et al 1972:86). Some of the opinions recorded in the international survey by Goldschmidt et al (2001:288) supported the presentation of portfolios at interviews. Objections to this tool include the logistical considerations, including travel distances and the time (and some argue experience) required to conduct interviews. On the other hand some respondents to the international surveys and other authors – see Chapter 3.7.4 – are clear that a selection interview provides an opportunity to access aspects of an applicant's potential that would not otherwise be discovered.

The following analysis relates to Section 4 of the South African survey. Respondents were asked if interviews with applicants, either as face-to-face meetings or via telephone or videoconferencing facilities, were considered during selection of beginner students for the 2016 academic year. Respondents who indicated that they did interview applicants were asked to provide more information, including how interviews were used, who conducted them and if, and how, interviews were weighted with other assessment tools. Respondents were asked to explain if they thought that interviews were useful and were invited to motivate their opinions.

Four, or just less than half of the respondents, indicated that they used interviews as part of selection. All of the institutions that conducted selection interviews also required applicants to submit portfolios. In all cases members of the school's academic staff conducted the interviews, but in one instance a psychologist was added to the panel; this person also oversaw the psychometric tests that this specific institution required applicants to take. It was mentioned by other respondents that the duration of an interview is 15 minutes and it was deduced that interviews were held towards the end of the selection process, or in fact was the final opportunity for selectors to assess applications.

From some responses received it was clear that the interview served more than one purpose and overlapped with the personal statements in that it contextualised applicants to the selectors. A respondent stated that the selection interview focussed less on architectural knowledge (which was tested through

other means), but more on the applicant's insight and the person's sense of self. At one institution an interview was used:

To check [an] applicant's understanding of what architecture entails, correlate their interests with skills required, gauge [the] level of interest [and] motivation, view [the] portfolio of own creative work, check that linguistic skills correlate [with those presented in other assignments and to] pick up exceptional traits and approaches.

One respondent stated that interviews allowed more mature students with wider worldviews to excel, while another mentioned that the personal development, attitude and confidence of an applicant became apparent, but qualified it by adding: "Not all people interview well, they might be nervous. It is important for the atmosphere to be welcoming in order to get the most out of the interview. Intimidated applicants don't perform well and it's not conducive to the assessment process." An opinion expressed by a respondent that did not conduct interviews for the 2016 intake had previously found that interviews could be misleading and "[...] in terms of logistics, one needs to weigh the time and resources available against the gain in accuracy of the tool in terms of prediction of success".

All the respondents who used interviews indicated that they were weighted with equal importance to other assessment tools and agreed that it had significant value during selection. One respondent's experience showed that applicants with high scores in the portfolio and interview performed better in their studies at the specific institution than those with an equal total score, but made up of a higher academic rating and lower portfolio and interview assessments.

None of the other assessment tools surveyed received such positive feedback from those who used it. Despite the logistical disadvantages and the fact that they are time consuming to conduct, the unanimity of respondents who conducted interviews makes it clear that it contributed meaningfully to the selection procedure and outcomes at those institutions. This correlates with the case study of the Bartlett and some opinions expressed by respondents in the international surveys – see Chapter 3.6.3 and 3.7.4.

4.6.7. Special architecture tests

Special architecture tests were used in combination with portfolios for the entry competitions in the Beaux-Arts system – see Chapter 3.6.1 – and the cumulative data of two international surveys indicate that it was the fifth most popular of eight assessment tools, used by 19.9% of respondents (Salama 2015:86). These tests are specific to the architectural disciplines and can reveal aptitude for studying architecture and can include tasks that pertain to visual memory, spatial organisation, drawing and design. These tests are often designed for a specific school of architecture and are usually administered by that school. In Chapter 3.7.5 it was found that such tests were conducted on a national basis in India and Sweden.

The following analysis relates to Section 3 of the South African survey. Respondents were asked if the outcomes of special architecture tests were considered during selection for the admission of beginner

students for the 2016 academic year. Those who indicated that they did consider such test results were asked to provide more information, including a brief description, which aspects were tested and how it was assessed and weighted. Opinions were invited on how useful special tests were as selection tools.

Four of the ten respondents indicated that they required applicants to take special architecture aptitude tests. The survey results indicated that one such a test consisted of a thirty-minute drawing test where the applicant had to demonstrate an ability to draw and visualise objects from different points of view. At the opposite, and lengthier, end of the spectrum was a five-hour test that consisted of a two-hour paper followed by a three-hour online test taken under supervised conditions.

All of the respondents that used special tests indicated that they used it to assess three-dimensional abilities and creative potential; three indicated that visual communication skills were included and two pointed out linguistic communication skills (as written arguments and literacy were embedded in these tests). One respondent indicated that general knowledge was included and two indicated that the tests they conducted in-house also tested a basic proficiency in numeracy. One mentioned that general logic and another “Logic in terms of constructing things” were assessed.

Two institutions indicated that the special architecture aptitude tests were weighted equally with that of the other assessment tools, while for the other two these tests were the only tools that carried real weight in the selection outcomes. This was motivated by the fact that a special test allowed for a more accurate demonstration of the skills required for architectural studies. While one respondent thought that the test had some value as a useful assessment tool, the three other respondents who used them were convinced that it had significant value. One of the latter thought that “The test ranking allows for a dispassionate approach that is seen as more rigorous than a ‘subjective’ evaluation of a portfolio” and another explained its value as follows:

[...] it can be tailored to assess candidates for possible suitability and fit with the approach and objectives of a specific architectural learning site, [...] it provides a good platform for comparative assessment, and [...] it can be developed and implemented in a way that makes it logistically possible within the ambit and available resources at the specific [school of architecture].

Such opinions make it clear that bespoke assessments carried more weight at some schools of architecture than generic indicators of academic or other merit. It is of notable interest that even subjects that are principally covered in the NSC curriculum, especially Mathematics, were re-tested by least at two respondents. It is, however, not clear if this was intended as a more appropriate means of assessing the application of mathematical knowledge, or if it indicated distrust in the national school system’s teaching and assessment standards. At the same time none of the respondents that took special tests required applicants to take the NBT – the other platform that could assess specific mathematical skills. One respondent who used special tests also conducted interviews and combined the two in sequence; this approach had the advantage that applicants do not have to travel to the institution on more than one occasion.

To sum up, one should not be surprised that schools of architecture designed mechanisms to reveal skills and test areas of knowledge that they value or found lacking in other means of assessment. The survey indicates that respondents valued the fact that they could devise tests with a high level of specificity directed at their particular academic programmes and normative positions. It was also revealed to be an effective use of resources as institutions could tailor the test and its presentation. Like interviews it does require of applicants to visit the school of architecture and therefore has similar advantages to applicants who can use the opportunity to familiarise themselves with the school, its people and facilities.

4.6.8. Workplace experience

Workplace experience, also known as job-shadowing, was not an assessment tool that was included in the international surveys. The researcher observed its potential as an assessment tool – see Botes (2015) – and therefore included it in the local survey.

Alexander and Dlamini (2012:830) argue that there is a neglect of career assessment and counselling which contributes to the high dropout and failure rates at institutions for higher education in South Africa, especially for those students from marginalised backgrounds. Abercrombie et al (1969:17) and Nelson (1974:83) mention that most schoolteachers and school vocational councillors had a limited understanding of the many facets involved in the practice of architecture and that they are therefore, as a rule, not capable of offering a great deal of assistance to a learner who is interested in pursuing studies in the field. Nelson (1974:83) also argued that one of the best ways for a prospective student to learn about the profession is through part-time work or an internship. Campaigns such as ‘Take a girl child to work’ – see SACAP (2016c) – has recently created awareness among South Africans of the value of workplace experience.

Considering the mysterious ‘black box’ of architectural education (Banham 1990:22-25) and that architects are ‘hidden professionals’ in South Africa (Janse van Rensburg 2015:7), it is imperative that prospective students of architecture get an opportunity to inform themselves of the outcomes associated with the programme and career they wish to pursue.

[...] it was observed that those students who had prior exposure to practitioners through school job shadowing, seemed surer of their decision and more committed to their studies. Not surprisingly, career satisfaction is regarded as a core measure of life satisfaction or, in borrowing from Professor Roger Fisher, one should aspire to a ‘good fit’ – in this instance between an individual and his/her chosen career path (and therefore his/her field of study). (Botes 2015:40-41):

Workplace experience thus offers applicants the opportunity to confirm their career choices based on first-hand experience. It creates an opportunity to observe and interact with architects at work, view their projects and the nature of the architectural practice as a place of work. This is all the more important as an architect’s office usually differs from the working environment of other professionals, such as legal or medical practitioners.

The following analysis relates to Section 9 of the South African survey. Respondents were asked if applicants were required to job-shadow an architect or to gain first-hand workplace experience during selection for the admission of beginner students for the 2016 academic year. Those who indicated that they did require such experience were asked to provide more information, including a description of the requirements and how the content was assessed and weighted. Opinions were invited as to how useful workplace experience was considered as a selection tool.

Four respondents indicated that workplace experience was required. One respondent stated that it was not an absolute requirement, but one that was strongly recommended, while another explained that a visit to a construction site could serve as a last resort if the applicant could not gain access to a practicing architect or technologist. Three institutions required written confirmation from the architect or practice that the applicant had visited them. In addition two required some insight into the nature of the applicant's exposure during the practice visit – one asked that the applicant give a brief description of the experience while the other asked the practitioner to provide an overview thereof. Another respondent required that the applicant discuss aspects of a career in architecture with the practitioner. Additional requirements included that the applicant make drawings of the practice's projects, the office environment and possible buildings sites that they might have visited as part of the job-shadowing assignment.

One respondent stated that the experience is referred to and probed at the subsequent selection interview and another respondent expected it to be mentioned in the applicant's personal statement essay if it had made a significant impression on him or her. Two respondents (or half of those who used the tool) weighted workplace experience with less significance than other tools.

One respondent stated that it was just a minimum requirement and that it indicated to the applicant what an architect might do, but that it did not indicate what the applicant would be able to do. This respondent thought that workplace experience was of little value in the selection process. Of the remaining two respondents, one each thought it was equal to other considerations and that it was considered, but not formally allocated a weighting. It was thought to have some value in selection by one respondent, and significant value by two respondents. One of these motivated this opinion by stating that a strong response by the applicant indicated “[...] interest, motivation and [an] understanding of the chosen career”.

A respondent warned that, despite its inherent value, the requirement for workplace experience could be exclusionary in cases where applicants from remote or rural areas may not have access to architects' offices in their area, but added that “Experienced assessors will ignore this aspect when they realised the applicant's place of origins”. One institution that did not formally require workplace experience from applicants mentioned that it was nonetheless discussed at interviews. In this context it served as an indication of how serious the applicant was and how much research the applicant did through their own initiative. Another respondent who did not consider workplace experience necessary for selection volunteered a similar opinion and thus negated the formal requirement of such an assignment.

It is clear that institutions that used workplace experience as an assessment tool during selection do so in order to better inform applicants about their possible study and career choices, even when it serves only as a recommended exercise that is not formally weighted. It had the advantage that it offered applicants who visit an architect's office first-hand experience of the nature of professional practice and the outcomes associated with the academic programme they wished to pursue. When one considers that, as a rule, beginner students are neophytes to architecture (Abercrombie et al 1969:2; Sandrock 1960:8) and that many applicants, especially those from disadvantaged backgrounds, may not understand what architecture entails – see Oluwa (2017:52) and SACAP (2016a:6) – this tool becomes more relevant to a post-colonial and developing economic African context. As was the case with interviews and special architecture tests, logistics and travel distances may prove challenging to some applicants. On the other hand it could be argued that the value of workplace experience is greater than the demerits that the difficulties pose.

4.6.9. Written arguments and literacy

This assessment tool was referred to as essays in the international surveys reported on in Goldschmidt et al (2001) and Salama (2015:86). Because there is an overlap, and possible confusion, with the personal statement assessment tool, its heading in the survey form was changed to reflect its purpose more accurately. Goldschmidt et al (2001:283) indicated that short essays of about 500 words, or one page, were used to assess an applicant's communication and reasoning abilities. While only 9.3% of international respondents used this tool, Goldschmidt et al (2001:287) showed that more respondents appreciated good writing and reasoning skills and that several institutions indicated that they value the language component in other assessment tools, such as academic records or aptitude tests, highly.

The following analysis relates to Section 7 of the South African survey. Respondents were asked if aspects of written arguments and literacy were considered during selection for the 2016 academic year. Respondents who indicated that they did use it were asked to provide more information, including a description, if and how these textual outputs were weighted with other tools. Respondents were asked to explain if they thought that it was useful to consider these tools during selection and were invited to motivate their opinions.

Four respondents considered written arguments and aspects of literacy during selection. Three of these indicated that it was part of other assessment tools, either as part of the portfolio requirements or embedded in a special architecture aptitude test. The two respondents who indicated that it formed part of the selection test did mark linguistic communication skills as an aspect that was assessed in their tests, while the institution that included it in the portfolio required of applicants to explain the conceptual approach to one of their design submissions in writing. The fourth respondent indicated that written arguments were separately assessed in an assignment that asked applicants to write an essay about a chosen or favourite building from their hometown. This approach made the task more accessible and in

addition required an opinion to be offered and described, argued or defended. The value of a submission of this nature by a prospective student of architecture is self-evident.

One respondent did not indicate how written arguments were weighted as a separate concern, but earlier indicated that the test of which it formed part of was, in effect, the only assessment tool that determined selection results. Two other respondents applied it while having equal importance with other assessment tools and one indicated that it was considered, but not formally weighted. This institution also considered it as having some value, while the other three respondents thought it had significant value in the assessment of applications.

While only four local schools of architecture indicated that they used such textual constructs as a separate assessment tool, more consider language and reasoning skills that may have been embedded in other tools and considerations. In the discussion of the academic record earlier in this chapter a respondent was quoted where it was indicated that good results in language subjects usually indicated a potentially strong student of architecture. This institution did not indicate that they considered written arguments separately, but they did require a written argument as part of the portfolio. It has also already been shown that minimum achievement ratings in at least one, but some cases two, South African languages were required by eight of the ten respondents. It therefore seems that aspects of literacy and an applicant's abilities in linguistic construction and communication are indeed reflected on, albeit not always as a distinct category.

4.6.10. Generic aptitude tests

Generic aptitude tests include general scholastic aptitude tests and psychometric tests that examine a range of cognitive and scholastic abilities. They are generic and thus not limited to applicants for architecture. External bodies or practitioners, such as vocational councillors or psychologists, often administer these tests. This assessment tool proved to be the second most used in the international surveys, with only academic records being used by more schools of architecture. The cumulative data in Salama (2015:86) indicate extensive use of this assessment tool in the United States of America.

The following analysis relates to Section 2 of the South African survey. Respondents were asked if the outcomes of generic aptitude tests were considered during selection for the admission of beginner students for the 2016 academic year. Institutions that indicated that they did consider such tests were asked which tests were used and requested to provide more information, including a brief description, which aspects were tested and how it was assessed and weighted. Opinions and motivations were invited on how useful generic tests were as selection tools.

This assessment tool proved to have the least number of users in the local survey. Three respondents indicated that they considered generic aptitude tests. Two of the three respondents required of applicants to take the NBT in all three domains, namely academic literacy, quantitative literacy and for the section on

mathematics. It was reasoned that the NBT was a good way of testing cognitive ability, especially for “[...] weaker students overlooked by the NSC system”. A respondent to the survey opined that the NBT results served as confirmation of the applicant’s abilities if they were consistent with the academic record. According to the National Benchmark Tests Project (NBTP 2016:12-14) the NBT results are deemed to be indicative of a student’s readiness to cope with tertiary study and are intended to complement the NSC results for purposes of comparison and calibration.

The tests are criterion-referenced, i.e. they are aimed at assessing students’ academic and quantitative literacy and mathematics performance against standard levels of performance regarded by experts in the fields as being acceptable for entry into higher education in the three fields. (NBTP 2016:12)

An added advantage of the NBT system is the general accessibility of test venues. There were eighty-nine such venues across South Africa and fifteen in the neighbouring Southern African Development Community countries where the tests could be taken for the 2016 academic year (NBTP 2016:4).

One of the institutions that required NBT also required psychometric testing, while the third only required psychometric testing. At both universities that required psychometric tests they were administered by specialised units and it was required that applicants attend a test session on the respective campuses. One respondent commented that this arrangement was not ideal for applicants who have to travel long distances and that it negatively affected the number of international applicants who could be considered for placement. The hope was expressed that psychometric testing could be done online in future. It was also noted that, in both of the respondent’s instances, applicants were expected to pay the cost of the psychometric test in addition to the standard university application fee; in both cases this amounted to costs that were significantly higher than that for the NBT. It was stated by one respondent that the psychometric results gave the institution insight into an applicant’s social behaviour and, moreover, served to advise the school of architecture about potential gaps in cognitive areas and thus allowed for the development of mitigating up-skilling programmes if and when they were required.

All three respondents that considered the results of generic aptitude tests as a rule considered it as having equal weighting with that of other assessment tools. Two of these respondents thought that it had significant value in selection, with one stating: “A general aptitude test such as the NBT is seen as a good mechanism for testing applied cognitive abilities beyond the prescribed curricula of various schooling systems.” The third respondent was not sure of the value of the psychometric test battery as its results were not available to the school of architecture.

Like some of the other mechanisms, generic aptitude tests were used to give selectors a better indication of the applicants’ abilities (or, in certain cases, of their shortcomings). Ultimately the value lay in either augmenting NSC results, or, that it provided an additional lens or set of lenses through which applicants could be viewed. The low level of interest in this tool among local institutions was surprising when one considers how popular it was in the international surveys. The fact that one respondent was unable to access the results of psychometric tests creates some doubt as to its value in the selection procedure.

4.6.11. Letters of recommendation

Data from Salama (2015:86) indicated that letters of recommendation were used by only 10.2% of international respondents and that the majority of these were from the United States of America. Abercrombie et al (1969:17) highlighted the fact that the value of such recommendations depended on the degree of knowledge the referee had on matters of architectural education. It was also shown in Chapter 3.7.6 that such recommendations are often used for admission to postgraduate programmes instead.

The following finding relates to Section 8 of the South African survey. Respondents were asked if letters of recommendation were considered during the selection of beginner students for the 2016 academic year. Respondents that indicated that they did request such recommendations were asked to provide a description thereof and indicate if and how these letters were weighted and whether it was considered to be a useful assessment tool.

None of the local respondents indicated that they required letters of recommendation, but one mentioned that they did pay attention to such recommendations if applicants included them in their submissions. No other findings were made with respect to letters of recommendation.

4.6.12. Other aspects

The following analysis relates to Section 11 of the questionnaire. Respondents were asked about the value of selection at the institution they represented, whether formal or informal research was conducted on the success of selection and the history of selection for the programmes in architecture.

Two respondents were of opinion that, at best, their selection procedure had the function of checking candidates against a necessary threshold, while seven thought that, in addition to checking candidates against a necessary threshold, it also rendered modest predictions of candidates' future performance as students. Only one institution proved to be certain that the selection procedure they followed rendered reliable predictions of candidates' future performance in that school of architecture; in this case the response was based on research through monitoring of records or analysis. For the most part, namely for seven of the ten respondents, opinions were based on the individual respondent's own impressions and overall perceptions, while two other respondents, apart from the one indicated above, based their opinions on research and analysis. One respondent mentioned that the institution was busy investigating software solutions that would make it possible to track student performance in a holistic manner. A respondent from an institution that did not conduct any formal or informal research into selection stated that "It was necessary and much needed".

Selection procedures followed by schools of architecture were, for seven respondents, unique in the institution, while two respondents indicated that their procedures were also used for a limited number of

other, presumably related, academic programmes at their institutions. One respondent did not know if the selection procedure was unique.

While eight of the respondents could not say when selection was first introduced for the architecture programme at their institutions, one answered that it was first used for the intake of 1989 and another that it was for the 2008 intake, although the latter answer suggests that that this only relates to the intake for which the current procedure was first used.

Respondents generally felt that good academic results across the board were a good measure of success at their institution. Five of the ten respondents ranked this aspect first, while two ranked it as the second most important measure and two more ranked it third most important. The personal development of a student received the second highest ranking as an overall indicator of success, followed, in order, by the development of professional skills, completing the course in the minimum prescribed time and the outcomes of national and international student competitions. Academic results in design only was placed sixth overall, with one respondent adding that students that develop a social conscience was considered an additional measure of success.

Overall this section of the survey indicated that the academic results of students of architecture were considered more indicative of success than academic results for school were. It is also of interest that respondents' perceptions of the success of their selection procedures proved to be more significant than the monitoring of results through research.

4.6.13. Numbers and demographics

The following analysis relates to Section 12 of the questionnaire. Respondents were asked to indicate the number of applications they received for the 2016 academic year, how this compared to previous years, the size of the first year cohort and if aspects of demographics were considered during the selection process.

While four respondents were unable to indicate the total number of applications they received for 2016, the numbers for the six institutions that did provide figures ranged from 300 to 1 862, with an average number of 1 128 per institution that provided figures. Nine respondents were able to indicate how the number of applications for the 2016 academic year related to previous numbers: five indicated that numbers were lower than in previous years, while one thought it was similar and three that it was higher than before.

Institutions were asked to indicate how many selected students started their studies in architecture as beginner or new students in 2016. Numbers ranged from 40 (for the smallest intake) to 96 (for the largest intake), with an average of 67. It was thus established that a total of 671 students began studies in architecture in South Africa in the 2016 academic year. Four respondents indicated that their intake was

higher than in previous years, four indicated that it was similar and two that it was lower than before. All ten of the respondents indicated that they limited the number of students who were admitted annually.

In the international survey Goldschmidt et al (2001:289) noted that “[...] some schools go to extreme pain in order to ensure that candidates of diverse backgrounds and abilities are identified and offered places.” In view of the transformation agenda discussed in Chapter 2.5.8, the local survey asked respondents if demographic data played a role in the composition of the 2016 cohort. Four respondents, that is less than half, indicated that it did, with one each indicating gender and population group as factors. The latter respondent stated that it was important to “achieve demographic transformation of the student cohort”. Two institutions used multiple indicators, with one combining population group and gender and the other population group, gender, nationality, age and whether an applicant came from an urban or rural area. In this instance the institution assigned all applicants with a disadvantage factor to signify these considerations. This follows the principle of weighting the academic record for socio-economic and other factors that as recorded by Abercrombie et al (1969:17). In the South African context this should be read as an endeavour to address the need for transformation of the academy and the profession. The success and sustainability of this institution’s approach was not addressed in the survey.

It is clear that the demand for places in schools of architecture far outnumber the number of available placements – even the school with the smallest first year studio received applications from more than seven times their intake quota. This emphasises the need to select students for admission into schools of architecture and validates the research into selection practices in principle.

4.6.14. Looking forward

The following analysis relates to Section 13 of the questionnaire. Respondents were asked how they would change, improve, refine or revise their current selection process. They were invited to discuss or briefly motivate their responses.

While the scope of answers in this section varied considerably, some trends did emerge. Three of the ten respondents indicated that the current selection regime worked “relatively well”, although there would always be room to adjust and refine the procedure. Six institutions suggested minor tweaks in order to improve their existing processes. This included, in three instances, increasing the online component of selection, either as a cost-saving measure, to streamline the process or to promote more sustainable practices. One respondent mentioned that online submission of portfolios would have cost benefits to applicants. An institution that conducted psychometric testing would prefer that this aspect also be made available online.

The neophyte argument was raised by a respondent who would like to see the portfolio requirements revised so as to be in line with applicants’ contexts and their level of understanding at the time of their

application. It remains a challenge to test aptitude for a specific programme, such as architecture, if the applicant has a very limited frame of reference and cannot reasonably be expected to know more or better.

Three institutions mentioned that the centralised administrative component of selection was sluggish and that the institutions' admissions departments took too long to process applications. It was suggested that the process be streamlined to speed it up. One respondent made particular mention that this delayed the distribution of their selection requirements to applicants. On the other hand, one head of a department bemoaned the fact that potentially good applications were only lodged after the closing date and that it was problematic to consider these with fairness to other applicants.

Four respondents indicated that they would prefer to initiate major changes to their existing selection procedures. One was considering adding a visual, aural/auditory, read/write and kinaesthetic (VARK) questionnaire and another wished for interviews, even if it meant that they had to be conducted via videoconference. It was also proposed by another respondent that selection be scheduled to overlap with a winter school through which some applicants could then be automatically accepted if they proved suitable. A respondent who only considers final NSC results indicated that other provisional results should preferably be included in future; presumably this will allow for a more efficient process with earlier results, even if they were made conditional to the upcoming final NSC results.

Three institutions raised concerns over coaching for selection, with one noting that "many privileged applicants seek coaching in order to have good applications". All three of these respondents considered a change in format that would allow for tests on campus to minimise the impact of coaching efforts, while in addition, one thought it would also eliminate queries about the authorship of portfolios. It should be noted that institutions that conducted special architecture tests or required a combination of portfolios and special architecture tests did not raise these issues. It is presumed that the former concern is addressed when tests are conducted under supervision, while the latter combination presumably made it possible to compare work prepared at home with the outputs of a test taken in a controlled environment. Obviously there are cost and other logistical implications when it is required that applicants attend selection tests or interviews at an institution; these concerns seem to be overshadowed by the need for authentic and fair assessment.

Two respondents thought that the most equitable selection system would likely be to allow applicants to study architecture for a semester so as to "[...] assess how their skills, cognitive abilities, creativity and perseverance develop, and, inversely, provide them with a reality-check of what architecture and studying architecture entails". This effectively amounts to delayed selection, an approach that was followed at the Bauhaus – see Chapter 3.6.2 – and also recorded at other schools by Goldschmidt et al (2001:288). One local respondent opined: "[...] the best possible solution, if we could attain it, is a well-designed introductory programme lasting 6 months, with a possible 6 month's internship". The obvious concern with this approach is the high number of applications that some institutions receive – four respondents

indicated that they received more than a thousand applications for 2016 – and that considerable resources would be required to sustain such an undertaking, especially with regard to the design studio.

While there may not be consensus on all matters, it is clear that respondents had informed opinions and that they were aware of the strengths and possible shortcomings of their respective selection procedures. It was also clear that aspects that some were trying to address had already been resolved by others. A frustration with administrative and bureaucratic processes was evident, as was a desire for authentic assessment and opportunities for fair judgement. Unfortunately it was also evident that no shortcut existed and that resources – both those of the school and the applicant's – were major considerations in the design of selection procedures. This often had to be weighed up against other aspirations to find a middle ground or to create a context for fair assessment.

4.7. DISCUSSION

The data collected through the survey suggest that, in principle, selection was necessitated by the fact that applications received by schools of architecture in South Africa for the 2016 academic year outnumbered the number of students that were finally selected and allowed to register. Although all respondents did not, for whatever reason, provide the number of applications they received for 2016, the six respondents that did provide numbers received between 300 and 1 862 applications – amounting to an average of 1 128 per institution – while the intake for all ten institutions varied between 40 and 96 beginner students – an average of 67 students per respondent school. This approximates to an average acceptance rate of less than 6% of applicants. Assuming that the intake per institution was in line with available resources, it is therefore concluded that selective admission was necessary.

While the undersupply of available places can be ascribed to the high demand placed on resources by studio presentation – see Chapter 3.5 – the high level of oversubscription by applicants is surprising considering that the literature suggests that architecture is not a profession that many school leavers are familiar with (Sandrock 1960:8; Abercrombie et al 1969:2; Nelson 1974:83; Janse van Rensburg 2015:7). At the same time one should bear in mind that, according to statistical trends, not all of the 671 students who began their studies in architecture in 2016 in South Africa will graduate. This is due to the high attrition rate that is associated with programmes in architecture; rates of attrition are especially high during the first year of study (Kemp 1991:1; Wits CUBES 2008:3; Janse van Rensburg 2015:156).

The survey results indicate that all of the respondents selected applicants for admission and that all of the respondents considered multiple assessment tools, even if they valued the contribution of some of these more than others. Respondents used a combination of between three and six assessment tools, with an average of 4.2 of the nine tools per institution. This average is substantially higher than the combination of 2.44 recorded for international respondents in Salama (2015:86). These findings support the opinion of Olweny (2008:5) when he stated: “Certainly no single means of assessing students for entry into

architecture programmes is 100% reliable; as such a combination of different assessment criteria is desirable.”

The summary in Table 4.1 provides only broad strokes of the survey findings as the qualitative findings suggest intrinsic differences in the approaches and value judgements of respondents, even if they proved to use the same assessment tools. This is in accordance with the findings of the international surveys – see Chapter 3.7.9. Some trends did emerge from the local survey results. While all of the institutions considered an applicant’s academic record, seven of the ten respondents thought that academic records were not significantly useful as assessment tools and that it merely had some value. Nine of the ten respondents required of applicants to have taken and passed Mathematics for the NSC, while eight had minimum requirements for the applicant’s language subject, or subjects, in the NSC. Aspects that the academic record failed to reveal were assessed through other means, with eight respondents using a revelatory portfolio with prescribed contents in combination with other considerations. It is of notable interest that showcase portfolios were not widely used by respondents and it may be argued that such formats are probably more suitable to studies in the visual arts than for architecture. The list of add-ons included various groupings of the remaining assessment tools, that were, in order of popularity: personal statements, interviews, special architecture tests, proof of workplace experience, written arguments and generic aptitude tests. For the most part opinions about the value of the assessment tools were not unanimous, except for the value of selection interviews that was regarded highly by those who used them, albeit that there were only four respondents that did.

Table 4.1 indicates that only two institutions, namely respondents 7 and 9, in principle used the same assessment tools. These two schools were the only respondents that did not require portfolios for selection. In fact, both largely based their selection decisions on comprehensive special architecture tests of their own design. At closer inspection the differences between their respective approaches also become evident.

The survey indicates that only three of the ten institutions conducted formal research to measure the performance of students (and, by implication, the success of their selection procedures). The majority, namely seven respondents, did think that the selection regime they followed was suitable for checking candidates against a necessary threshold, but it might additionally render modest predictions of candidates’ future performance. Their opinions were based on impressions and perceptions. This aspect correlated with the findings of the international survey, namely that only limited research is conducted with regard to selection and its outcomes.

Four respondents wished, in future, to introduce interviews or on-campus assessments and two wished to avoid the trend of applicants being coached for selection. It was clear that there was an ongoing tussle between the need for assessment of the authentic evidence and the limitations imposed by the availability of resources and other logistical challenges, including travel distances in a country where all of the

schools of architecture are located in five of the nine provinces. It was therefore not surprising that three respondents wished to conduct at least some assessment through online procedures.

As was indicated in the international surveys, the availability of resources has a significant impact on selection. The head of a school remarked that the time and other resources invested in selecting students should be weighed up against the its proven validity and students' performance. Two other respondents indicated that the recent omission of specific assessment tools was due to a lack of resources, while another pointed out that selection was affected by #FeesMustFall protests that prevented some assessments from taking place.

It was encouraging that six of the ten respondents indicated that they would implement only minor changes to their selection procedure if they were given the opportunity to do so. This is possibly an indication that institutions attempted to find a good fit between the applicants they admit and their curriculum objectives. In some instances respondents had made substantial effort to adapt or develop assessment tools so as to address the specific concerns or pedagogic approach of that school. With reference to SACAP's requirement that schools nurture their unique characteristics (SACAP 2012:3), such selection practices contribute positively to a school's identity being reinforced.

4.8. RESEARCHER'S COMMENTS ON THE SURVEY FINDINGS

The survey was intended to collect data on selection by schools of architecture in South Africa in order to establish a framework of local practice. While this was primarily achieved, some aspects remain unresolved because the design of the questionnaire did not allow for it at the time. An example is the demographic composition of the cohort for 2016. Three respondents indicated that they considered the population group of applicants for selection purposes (a fourth only considered gender), but the success of the eminent transformation agenda during selection was thus not addressed in the survey. The fact that the only publically available data on the demographic composition of student bodies at schools of architecture in South Africa are out of date – the last report in this regard was published in 2008 on behalf of SACAP by the Centre for Urban and Built Environment Studies at the University of the Witwatersrand (Wits CUBES 2008) – and thus any attempts to determine the status quo for transformation purposes cannot be accurately determined from the information gathered.

Respondents were not explicitly asked to formulate the normative position of the schools of architecture they represented, although the questionnaire, in section 11, provided for respondents to indicate what they considered to be measures of success for their students. With hindsight more exact expressions of the value system of each school of architecture would have provided insight into the approach and rationale of a school's selection procedure.

The questionnaire did not provide for respondents to motivate why they did not use specific assessment tools. Although some participants volunteered opinions, it would have been beneficial to also harvest opinions as to why certain tools were not used, as opposed to just asking why some were used.

4.9. SUMMARY

It is concluded that schools of architecture in South Africa receive far more applications than the number of places they have available for students. Students are therefore selected for admission through multiple assessment tools that require of applicants to undergo assessment in more aspects and formats than was established for international respondents in Chapter 3. Apart from academic record as the most used assessment tool, the order of popularity differed substantially from those recorded in the international surveys. No local school required letters of recommendation and generic aptitude tests, which were used by about half of the international respondents, and these proved to be the least used by local schools. Portfolios were used by far more South African schools than was the case elsewhere and a new assessment tool emerged in the form of workplace experience.

There is no outright agreement among local respondents about the value of assessment tools for selection. As was shown for the international surveys, disparate motives support the use of the same assessment tool and the same assessment tools are valued and applied differently by individual schools. Similarly the majority of South African respondents do not conduct ongoing research or analysis of the success of their selection decisions and opinions are most often based on perception.

4.10. CONCLUSION

The second subproblem was to determine and critically investigate the admission procedures and assessment tools for the selection of beginner students into schools of architecture in South Africa.

The supposition to subproblem two is that schools of architecture in South Africa use admission procedures and assessment tools for the selection of beginner students that are similar to those used by schools of architecture worldwide. The survey results determined the admission procedures and assessment tools used by local schools of architecture and provided a framework for local selection practise, as summarised above. South African schools of architecture do follow some of the admission procedures and assessment tools that schools of architecture worldwide use, but also approach some aspects in very different ways to accommodate aspects pertinent to the local context and the realities of the locale and its history.