**Reading minds at a distance: an investigation into student motivation for study at an ODL institution and their expectations regarding employability.**

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Reading the minds of students sitting in front of you is a challenge, but doing so over a distance in an ODL environment is virtually impossible. Therefore it is important to give attention to questions such as “Who are we teaching and why are they studying this subject”. We need to take student motivation for studying a particular subject into account in order to provide a course that fulfils the student’s expectations and provides the necessary academic content and preparation for employment. In this interdisciplinary case study, the motivation of students to study Biblical Archaeology at the University of South Africa (UNISA), which is the largest Open Distance University in Africa with a student compliment of over 300,000, is researched, statistically analysed and brought into relation with the study of Tourism, as well as with issues pertaining to graduateness and employability. The results indicate that although most Biblical Archaeology students are studying for reasons of spiritual growth and interest, many students are taking these courses in order to be prepared for a vocational opportunity.

**Key words:** Study motivation; ODL; Transactional Distance; Academic Plan; Employability; Interdisciplinary Studies; Biblical Archaeology; Tourism

**Introduction**

Education takes place for a reason, and educators train students for an outcome. The question is – do educators know what they are training their students for? One might think that educators offer a product (a course), and students accept the offer, therefore they are satisfied with what is being offered. In a complex and fast-changing world, this is no longer the case. All educators should constantly reflect on the continued relevance of their courses to the world and the context in which the course material and content is to be used and applied, as well as to the needs of the students taking the courses. In traditional contact education circumstances, the latter is relatively easy, because students are there to speak their minds about their circumstances, needs and motivation in relation to the course content. In Distance Education, however, this is not the case, resulting in the possibility that course material may be totally or partially irrelevant to students differing in location, age, circumstance and motivation. Therefore an important challenge in ODL

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is to read minds at a distance, in other words to become aware of the motivations and needs of students separated from the educator in terms of space and time. The question is – how is this to be done?

Traditionally, the profile of Distance Education students in South Africa was limited to mature students who were already employed. This profile has however changed significantly over the past few years. This is due to the change of policy for access to university studies at UNISA in order to redress historical inequalities, and the fact that Distance Education universities in South Africa are more affordable than full contact universities. The result is that there are now a significant number of young students coming straight from school to study at UNISA.

The Draft Policy Framework for The Provision of Distance Education in South African Universities dated May 2012 states that, “In common with higher education generally, distance higher education programmes also need to ensure that they equip students with the kinds of graduate competences needed for success after graduation” and there needs to be “Focus on programmes that will give successful graduates meaningful opportunities for employment after completion – in line with the New Growth Path”.

Concerns were expressed by the UNISA lecturers teaching Biblical Archaeology regarding the relevance of vocational opportunities available to students of Biblical Archaeology. The link between Biblical Archaeology and Tourism was established by one of the authors in her doctoral thesis entitled “Biblical Archaeo-tourism: a new vocational opportunity for Biblical Archaeology students”. One of the questions addressed in this study was whether Biblical Archaeology sites could be regarded as destinations for the “New Tourist”. According to Roberts (2011, 244), “After studying the concept of ‘New Tourism’, it can be seen that there is an untapped experience for this
‘New Tourist’ in the field of Biblical Archaeology. The field embraces all the criteria demanded by the ‘New Tourist’ – history, spiritual growth and unexploited tourist areas”.

Before conducting research which could link the two areas of Tourism and Biblical Archaeology with the possible development of vocational opportunities, the researchers decided first to conduct empirical research into student motivation for studying Biblical Archaeology. It was important to ascertain why students were registering for these courses and whether career opportunities, particularly in the field of tourism, were motivating factors. This is in line with the question posed in the Abstract, “Who are we teaching and why are they studying this subject”. This knowledge is necessary in order to provide a course that fulfils the student’s expectations and provides the necessary academic content and preparation for employment.

Because of the limitations of career opportunities for people who have studied Biblical Archaeology, most students at UNISA were assumed to be studying for interest only or for spiritual growth. By carrying out this empirical research into understanding who the students are and why they are studying, a very different picture has emerged.

**Aim of the study**

The aim of this study was to investigate whether Biblical Archaeology students at UNISA expect to be prepared for a vocational opportunity through their studies, and if so, is the field of Tourism regarded as a career prospect for these students. The reason for the investigation was for the lecturers to become aware of the motivations and needs of students who are separated from the educator through distance, both geographically and psychologically.
The objectives are as follows:

1. To empirically investigate student motivation for studying Biblical Archaeology at UNISA
2. To empirically assess the career choices of Biblical Archaeology students at UNISA
3. To provide course leaders and lecturers of Biblical Archaeology at UNISA with demographic and study motivation information to assist them with the planning of course content and instructional methods for Biblical Archaeology.

**Literature Review**

*Transactional Distance Theory*

Transactional distance is a foundational concept in Distance Education and learning. Transactional distance theory holds that the physical separation of the learner and instructor can lead to psychological and communication gaps that create misunderstandings and feelings of isolation (Moore, 1993, p.22-38). In this paper we examine the aspect of communication between the lecturer and the student, with particular emphasis on obtaining information from the students regarding their reasons for studying this particular module.

Moore (1993, p.22) states that transactional distance is a concept describing the universe of teacher-learner relationships that exist when learners and instructors are separated by both space and/or time. This theory is particularly relevant in the context of ODL institutions, such as UNISA, where all instruction is conducted through this separation between lecturers and students.
Moore states further that this relationship can be ordered into a typology that is shaped around the most elementary constructs of the field – namely, the structure of instructional programs, the interaction between learners and teachers, and the nature and degree of self-directedness of the learner (1973, p.661-679). For this current study we draw on all three typologies. The information obtained from the questionnaire is necessary for the content design of the instructional programs. From this questionnaire the data presented will provide the lecturers with details regarding the expectations of the students with regard to their reasons for studying, their future employment aspirations, their demographic profile as well as their religious/spiritual positions. All of this is necessary for the design of the actual modules. The second typology of learner-teacher communication is necessary because of the challenges imposed due to the physical separation of the two and feeds into the first typology.

Knowles (1975, p. 18) describes self-directed learning to mean a process in which an individual takes the initiative, with or without the help of others, to diagnose their learning needs, formulate learning goals, identify resources for learning, select and implement learning strategies, and evaluate learning outcomes. Therefore, by obtaining input from the students themselves, they are able to take some of the responsibility in diagnosing their learning needs and having these needs implemented into their course content.

The theory of transactional distance has broad implications in Distance Education and can be applied to potentiate innovative instructional approaches, promote the sustainability of Distance Education, and drive policy development (Gokool-Ramdoo, 2008).
Gaskell (2008) writing in an editorial for *Open Learning*, summarises by saying that “Successful distance teaching depends on appropriate opportunities for dialogue and well-structured learning materials, according to TD”.

Based on this theory of transactional distance, we put forward that it can equally be applied to the course content of study modules, particularly based on the students’ expectations and motivations for studying. Course material that worked 15 years ago and presented through 1st or 2nd generation Distance Education methods may no longer be relevant today.

**The Academic Plan**

Lattuca and Stark (2009, p.145) put forward that the capabilities, preparation, motivation, effort and goals of the students in their classrooms and programs all may influence instructors as they plan their curriculum and that few instructors systematically consider the learners’ needs, abilities and goals as they develop their courses.

According to Lattuca and Stark (2009, p.146), “The Academic Plan (figure 1) describes an array of influences on curriculum planners as they create and revise academic plans for courses and programs.”

Figure 1 (Lattuca & Stark 2009, p.146), highlights the relationship between instructors, purposes and their attention to learners’ individual goals and abilities and if these are not recognised and addressed, such differences can diminish the effectiveness of academic plans. Variation in students’ purposes for study can be attributed to both the cultural diversity of the learners as well as variations in other characteristics such as their academic preparation, prior knowledge, educational experiences and academic and career goals.
The importance of understanding learners’ goals and motivation for study thus becomes even more significant in Distance Education because of the geographical and psychological distance between the student and the lecturer.

**Graduateness and Employability**

“Graduateness may be seen as a level of knowledge, skills and understanding, employability is concerned with the way in which those who have completed university courses can be assimilated into national and international employment. (Glover, Law & Youngman, 2002, p.296)

The concepts of graduateness and employability are not unique to UNISA but are also part of an international reflection about the role of universities and the qualifications that they confer. In an article about graduateness and employability (Glover, Law and Youngman ( 2002, p.296), the authors state that while graduateness may be seen as a level of knowledge, skills and understanding, employability is concerned with the way in
which those who have completed university courses can be assimilated into national and international employment.

Wakefield, Ribchester and France (2008, p.33), from the department of Geography and Development Studies at the University of Chester, suggest that student employability is high on the teaching agenda of United Kingdom universities. They also state that universities are increasingly coming under pressure to equip students for employment once they have graduated.

This study investigated a new vocational opportunity which can be added to the course content and teaching of Biblical Archaeology. Tourism is one of the fastest-growing sectors of a country’s economy and is one of the world’s largest industries. By its very nature, tourism is an interdisciplinary field of study, embracing fields like economics, sociology, environmental science, geography, history and anthropology. This study linked Tourism with the field of Biblical Archaeology, and, in doing so, enhanced the vocational opportunities available to students who study Biblical Archaeology.

According to Lieberman and Remedios (2007, p.379), “One aim of a university education is practical: to impart information or skills that will be of practical value to students in their later lives and, more broadly, to society”.

**Interdisciplinarity**

Interdisciplinarity involves the combining of two or more academic fields into one single discipline. An interdisciplinary field crosses traditional boundaries between academic disciplines as new needs and professions have emerged.

The term interdisciplinary is usually applied within education and training pedagogies to describe studies that use methods and insights of several established
disciplines or traditional fields of study. Interdisciplinarity involves researchers, students, and teachers in the goals of connecting and integrating several academic schools of thought, professions, or technologies - along with their specific perspectives - in the pursuit of a common task.

An interdisciplinary approach means that subfields of research that do not neatly fit into one particular discipline are involved and the perspectives of various disciplines are combined and synthesised (Melkert and Vos, 2010, p.37).

According to Thompson Klein (2010, p.15), one of the editors of the Oxford handbook on interdisciplinarity, the expansion of the genus Interdisciplinarity, was propelled by new species of integration, collaboration, complexity, critique and problem solving.

She states further that “Many believe that interdisciplinarity is synonymous with collaboration. It is not. However, heightened interest in teamwork to solve complex intellectual and social problems has reinforced the connection, especially in terms of teaching and research management” (2010, p. 19).

Knight, Lattuca, Kimball and Reason, (2012) distinguished between multidisciplinarity and interdisciplinarity saying that multidisciplinarity brings two or more disciplines to solve a problem and that interdisciplinarity is marked by a synthesis of disciplinary knowledge and methods that provide a more holistic understanding of the problem.

The end goal of interdisciplinarity is what is important (Frodeman, Klein & Mitcham, 2010, p.xxix). They state that, “To one degree or another, the contributors to this volume share the intuition that the solution to our social, political, intellectual, and
economic problems does not simply lie in the accumulation of more knowledge. What is needed today is a better understanding of the relations between the fields of knowledge, a better grasp of the ways knowledge produced in the academia moves into society, and a better sense of the dangers as well as the opportunities of continued knowledge production.”

**Theoretical framework and methodology**

Positivism is a framework of research similar to that adopted by the natural scientist. Here, the researcher sees people as phenomena that have to be studied from the outside, and their behaviour will be explained according to factual data. Quantitative research is usually based on the positivist paradigm but as stated by Buckingham and Saunders (2007, p.19) it is possible to carry out survey research without necessarily being a positivist. This is indicative of the deductive approach, where the starting point is a theory, usually a hypothesis, after which data is collected and analysed. The sole purpose of collecting the data is to test the hypothesis.

Creswell (1994, p.87) states that, in qualitative studies, one uses theory deductively and places it toward the beginning of the plan for a study, whereas in quantitative research the object is to test or verify a theory, rather than develop it. The positivist researcher thus begins the study by advancing a theory, then collects data to test it and finally reflects on whether the theory has been confirmed or disconfirmed by the results of the study.

The positivistic paradigm tends to produce quantitative data using large samples. It is concerned with testing a hypothesis, and the data collected is specific and precise. The reliability of the results tends to be high and the validity low (Collis & Hussey, 2003, p.55).
Research design is defined by Sellitz, Jahoda, Deutsch and Cook (1964, p.352) as an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with the most economical procedures.

The emphasis of this study is descriptive as well as analytical, as it not only describes the motivations for studying Biblical Archaeology, but also the relationship between these motivations for studying Biblical Archaeology and various demographic variables and religious standpoints. In addition, it also investigated the types of career opportunities for which students of Biblical Archaeology are expecting to be prepared.

The method employed for the empirical research into student motivation for studying Biblical Archaeology was the self-administered questionnaire survey. The questionnaire is a quantitative survey method based on positivist assumptions.

Dillman (2007, p.13) states that designing a quality survey begins with two fundamental assumptions, first that the response to a self-administered questionnaire requires both cognition and motivation, and second that multiple attempts are needed to obtain a satisfactory response rate to the survey. The first requirement of cognition is satisfied when the questions are easily understandable and well thought-out and designed. The questionnaire for this study is attached in annexure 1 and the reliability of the questionnaire was tested through a pilot test.

The empirical questionnaire was sent to all students registered for all Biblical Archaeology and associated modules in 2009 at UNISA. The questionnaire consisted of nine closed-ended questions. Three of the questions presented the option of an open-ended response should the respondents need it. Although the main objective of the questionnaire was to obtain information regarding UNISA students’ reasons for studying Biblical
Archaeology, and their inclination towards possible career opportunities, certain demographic and spiritual affiliation questions were also included.

A database of all students registered for Biblical Archaeology modules at UNISA for the first semester of 2009 was compiled from information supplied by the IT Department and sent by email to those students who had access to an email address, while a hard copy was sent to the balance of the students. 338 students were on record as not having access to e-mail, and 404 did have access to email. The total number of 1st semester students was therefore 742. The questionnaire was sent with a self-addressed return envelope in order to minimise any resistance to returning the survey. The same process was used for the students who were registered for the second semester modules and 114 questionnaires were sent by e-mail and 131 by post, making a total number of 245. Therefore, 987 questionnaires sent out and 214 completed questionnaires were returned, giving a response rate of 22%.

**Research results**

The research was carried out through the use of a self administered questionnaire and statistically analysed using the Statistical Package for the Social Sciences (SPSS) in order to answer the question, “Who are we teaching and why are they studying this subject”.

In addition to answering the question about student motivation, demographic criteria as well as the religious/spiritual position of the students were also be investigated and reported on.

The results from the empirical are reported in three sections. First the demographic results obtained from the current Biblical Archaeology students are presented, in order to
contextualise the population that responded to this survey. This is followed by the primary results corresponding to the main focus of the study on student motivation, choice of career and preparedness for a vocation. Following this, the results of the questions posed concerning each student’s religious affiliation and spiritual beliefs is presented. The demographic and spiritual results have been included in this section as they contribute to a better knowledge and understanding of the current Biblical Archaeology student at UNISA. Included in each of the above results is a deeper analysis of the primary results using cross-tabulations of various questions and analysing these results statistically, in order to gain further insight into the trends which emerged from the survey.

The questionnaire on student motivation for studying Biblical Archaeology, which was used for this study, consists of nine questions. The response to each question is a name e.g. spiritual growth, tourism, male etc. The data values assigned to each name do not designate a quantity and the numbers allocated do not have any quantitative value. The scale type used for this questionnaire is thus nominal and the statistical tool necessary for the analysis of the data is the mode, which can be described as the category or value with the greatest frequency of cases (Elreck & Settle, 2004, p.442).

**Demographic results**

The results of the demographic variables are reported below and include age, gender, highest current educational level and current level of registration for Biblical Archaeology modules. These results were obtained from questions 1, 2, 3 and 4 of the survey questionnaire and a summary of these are presented in Table 1. These results are shown in ascending order from the most to the least popular statistic. This is followed by an analysis
of each of the four questions and each question is presented in a frequency table as well as graphically.

Table 1. Frequency table for results of demographic questions 1, 2, 3 and 4

<table>
<thead>
<tr>
<th>Question 1: What is the highest level course in Biblical Archaeology for which you are registered?</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd/3rd year modules</td>
<td>96</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>1st year modules</td>
<td>95</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Honours</td>
<td>12</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Masters/Doctoral</td>
<td>10</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Total Mode</td>
<td>213</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 2: What is your gender?</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>89</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>124</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Total Mode</td>
<td>213</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 3: What is your highest current educational qualification?</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matric</td>
<td>53</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Some Undergraduate</td>
<td>54</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Certificate/Diploma</td>
<td>47</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Postgraduate Degree</td>
<td>35</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Graduate First Degree</td>
<td>25</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Total Mode</td>
<td>214</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 4: Please tick your appropriate age group.</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-50</td>
<td>61</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>51+</td>
<td>56</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>50</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>31-40</td>
<td>40</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>&lt;20</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Mode</td>
<td>214</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

The first demographic variable investigated is the current level Biblical Archaeology module that students are registered for. From Table 1 it can be seen that 89% (n=191) of the students are studying undergraduate courses, while 6% (n=12) are studying at Honours level and 5% (n=10) are at masters/doctoral level.
Question 3 investigated the highest current level of education. From Table 1, it can be seen that 30% of students already have a first degree or postgraduate qualification, even though the majority of students (89%) are registered for undergraduate biblical archaeology modules.

Table 2 shows that 20% of students who are registered for undergraduate Biblical Archaeology modules already have a graduate or postgraduate degree. This information is important to the lecturers as teaching students who already have a degree can be different to teaching undergraduate students. This ties in with Blooms Taxonomy on learning domains which states that mastering the first domains should take place before the next ones can be mastered (Anderson, Krathwohl & Bloom, 2001). These domains are ordered from knowledge to comprehension, application, analysis, synthesis and evaluation. Each subsequent domain builds on the previous one. Postgraduate students should therefore be positioned further along the spectrum and learn at a more advanced level than undergraduate students.

Table 2. Students who already have a 1st degree

<table>
<thead>
<tr>
<th>Current registration</th>
<th>Already have 1st degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate modules</td>
<td>39</td>
</tr>
<tr>
<td>Postgraduate modules</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
</tr>
</tbody>
</table>

The gender statistics show that 58% of the students are female and 42% are male.

The majority of the students have either only a Matric certificate (25%), or have passed some undergraduate courses (25%). 21% of the students have already obtained a certificate or diploma.
The age demographic results are significant. As can be seen from Table 3 Biblical archaeology students at UNISA span a wide range of ages and educational backgrounds. Information obtained from the official UNISA statistics portal show the age spectrum for all UNISA students as follows:

Table 3. Comparison of ages of Biblical Archaeology students and all students at UNISA

<table>
<thead>
<tr>
<th></th>
<th>&lt;40</th>
<th>41-50</th>
<th>51-60</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students 2011</td>
<td>82%</td>
<td>14%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Biblical Archaeology</td>
<td>45%</td>
<td>29%</td>
<td>26%</td>
<td>100%</td>
</tr>
<tr>
<td>All students 2009</td>
<td>82%</td>
<td>15%</td>
<td>4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

From Table 3 it can be seen that the majority of UNISA students (82% in both 2009 and 2011) fall into the under age 40 category. The Biblical Archaeology students in 2009 however, have a completely different age profile. Only 45% of these students are under age 40 and the majority of students (55%) are over this age. It is interesting to note that 26% of all the Biblical Archaeology students are in fact over age 50.

The data is spread over a large number of values. This result is important, in that it is an indication to the course leaders of the wide spread of their students’ ages.
Results for Motivation for studying Biblical Archaeology

Table 4. Frequency table showing results of questions 5, 9 and 6

<table>
<thead>
<tr>
<th>Question</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 5:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which of the following best describes your reason for</td>
<td>Spiritual growth</td>
<td>106</td>
<td>35</td>
</tr>
<tr>
<td>studying Biblical Archaeology?</td>
<td>Interest only</td>
<td>83</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Career opportunities</td>
<td>61</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Filler module</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>305</td>
<td>100</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>Spiritual growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Question 9:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which of the following careers do you think you will be able to pursue</td>
<td>Teaching</td>
<td>124</td>
<td>26</td>
</tr>
<tr>
<td>once you have completed your studies?</td>
<td>Tourism</td>
<td>122</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Pastoral work</td>
<td>81</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Work on archaeological sites</td>
<td>71</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Museum work</td>
<td>58</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>27</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>483</td>
<td>100</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Question 6:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think that your studies in Biblical Archaeology have equipped</td>
<td>To some extent</td>
<td>78</td>
<td>37</td>
</tr>
<tr>
<td>you for a vocational opportunity?</td>
<td>Yes definitely</td>
<td>57</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Maybe</td>
<td>36</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Not sure</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Definitely not</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>212</td>
<td>100</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>To some extent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Undergraduate and Postgraduate students**

![Bar chart showing distribution of motivation reasons for studying Biblical Archaeology]

Figure 2    Motivation for studying Biblical Archaeology
From Figure 2 it can be seen that spiritual growth is the most common reason for students to register for courses in Biblical Archaeology (35%). This is followed by interest only (27%) and thirdly, 20% of the students state that they are motivated by the prospect of a vocational opportunity.

This figure of 20% however, changes when undergraduate/honours and masters/doctoral students are cross-tabulated and the results are as follows:

![Undergraduate/honours vs masters/doctoral student motivation](image)

**Figure 3** Undergraduate versus postgraduate motivation for study

From Figure 3 it can be seen that the number of undergraduate/honours students looking for career prospects has dropped to 19% while the masters/doctoral students are less motivated by spiritual reasons and more motivated by career prospects (40%). The cross-tabulated results were tested statistically by analysing the frequencies and applying the Pearson’s chi-square test to test for significance in the relationship between the educational level of the courses and the students’ motivation for studying theses courses. The $p$ value statistic is 0.007. Because $p < 0.05$, it can be concluded that a significant
relationship exists between the level of the qualification being studied and the motivation for studying. These results indicate that postgraduate students, particularly masters and doctoral students, are more inclined to career prospects as a motivation for studying Biblical Archaeology.

![Age groupings for students motivated by vocational opportunities](image)

**Figure 4** Cross-tabulation between age and career opportunities as motivation for studying Biblical Archaeology

Figure 4 indicates that the majority of students seeking career opportunities that could arise from their studies in Biblical Archaeology are aged between 41 and 50. On the surface, this statistic would seem questionable that people over the age of 40 are looking for new careers. However, the researchers found that there are thousands of websites devoted to the topic of career change after age 40, when typing “new careers after age 40” into the internet search engine ‘Google’.

During research for their forthcoming book, *Changing careers after 40: real stories, new callings*, Pile and Lingle (2010) state that changing careers after age 40 is a growing phenomenon and that most workers will have an average of three to seven careers in their lifetime.
The cross-tabulated results between age and motivation were tested statistically by analysing the frequencies and applying the Pearson’s chi-square test to test for significance in the relationship. The $p$ value statistic is 0.000. Because $p < 0.05$, it can be concluded that a significant relationship exists between age and motivation for studying Biblical Archaeology.

**Career choice**

Question 9 asked the students to indicate which vocation they think they will be able to pursue on completion of their studies in Biblical Archaeology. Five career options of Pastoral work, work on archaeological sites, Tourism, Museum work and Teaching were suggested to the students and there was also an opportunity for them to provide their own ideas on their career aspirations.

![Career choice of all students](image)

Figure 5  Career choice – all students
From Figure 5 it can be seen that 25% of the students chose tourism as their career of choice, which combined the options in the questionnaire of being a tour guide and the development of archaeological tours. 26% of the students chose teaching as a career option and 17% pastoral work. Once again we investigated whether there was a difference between undergraduate/honours students and masters/doctoral students’ vocational choice, the results of which can be seen in figure 6. Undergraduates/honours students still chose tourism as their career of choice although with a slightly lower percentage. The big difference comes in the masters/doctoral students where the percentage of students selecting tourism as the vocation of choice rose from 24% to 44%. Once again the cross-tabulations between level of academic study and choice of career were statistically analysed using Pearson’ Chi square test. The $p$ value in this case was 0.008 which is $< 0.05$, so it can be concluded that there is a significant relationship between the two variables.
Figure 6  Undergraduate/honours versus masters/doctoral career choice

Figure 7 presents the cross-tabulation results of the vocational choice of Tourism with only those students who indicated that they were interested in career opportunities. The results indicate that of all the students who cited vocational opportunities as their motivation for studying Biblical Archaeology, 31% of them chose Tourism as the career of their choice. The cross-tabulations were statistically analysed using Pearson’s Chi-square test. The $p$ value in this case was 0.000 which is < 0.05, so it can be concluded that there is a significant relationship between the two variables.
Figure 7  Cross-tabulation between students who are motivated by a career opportunity and their potential career pursuits

Figure 8 shows that the interest in tourism as a career grows linearly with each successive year of registration. Here it can be seen that just over 18% of 1st year students indicate that they would like to pursue a career in tourism, 26% of 2nd and 3rd year students, 33% of honours students and that the highest percentage of students interested in tourism are the masters and doctoral (44%). Figure 9 shows the opposite trend with the choice of pastoral work where just over 25% of 1st year module students chose pastoral work as their career choice. This figure declines linearly with each successive year of study and drops to only 3% of master/doctoral students wanting to pursue a career in the ministry.
Preparation for a vocational opportunity/employment

The results from table 4 question 6, and depicted in figure 10, show that only 27% of students say that their studies in Biblical Archaeology have definitely prepared them for a career opportunity, while 6% say the opposite, that they have definitely not been adequately prepared. The majority of students (67%) feel that they have been only
partially equipped for a vocation. This information is of significant importance to the lecturers and course content developers in the light of the arguments presented regarding the importance of employability for graduates.

![Bar Chart](image_url)

**Figure 10 Preparation for a vocational opportunity/employment**

In addition to the primary research questions and the demographic data that have already been reported on, students were asked to indicate their religious affiliation and their spiritual/religious beliefs. The results of the questions regarding spiritual and religious beliefs and affiliations are shown in the Table 5 below and the results are once again ranked in ascending order.
Table 5. Frequency table for results of spiritual/religious questions 7 and 8

<table>
<thead>
<tr>
<th>Question 7: Which of the following best describes your religious/spiritual position?</th>
<th>Result</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actively involved in organised religion</td>
<td>119</td>
<td></td>
<td>56</td>
</tr>
<tr>
<td>Believer but not active participant</td>
<td>60</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Atheist</td>
<td>9</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Uncertain</td>
<td>8</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Agnostic</td>
<td>6</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>214</strong></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td><strong>Actively involved in organised religion</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Question 8: What is your religious affiliation?                                  | Protestant               | 94 | 44 |
|                                                                                  | Other Christian          | 85 | 40 |
|                                                                                  | No religious affiliation  | 22 | 10 |
|                                                                                  | Catholic                 | 12 | 6  |
|                                                                                  | Buddhist/Hindu/Jewish/Muslim | 1 | 0  |
| **Total**                                                                         | **214**                  |    | 100|
| **Mode**                                                                         | **Protestant**           |     |

As can be seen from Figure 11, the majority of respondents (56%) are actively involved in organised religion, while 28% of students are believers, but not active participants. 4% of students state that they are atheists and 3% indicate that they are agnostic.
Figure 11  Religious/spiritual position

Figure 11  Religious/spiritual position of undergraduate/honours students versus masters/doctoral student
However, this picture changes when masters/doctoral students and undergraduate/honours students are analysed separately which is depicted in Figure 12. Once again the data was statistically analysed using the Chi-squares statistic. The $p$ value in this case was 0.000 which is $< 0.05$, so it can be concluded that there is a significant relationship between the two variables religious affiliation and level of study. Only 3% of the undergraduate/honours students indicated that they are atheists while this figure rises to 30% of postgraduate students. A large difference is seen in the results of the category of Active participation in organised religion where 58% of undergraduate/honours students have indicated that they are actively involved in their church while this figure drops to 10% of the masters/doctoral students.

**Conclusion and Discussion**

The research from this study shows that 20% of all students registered for Biblical Archaeology modules at UNISA during 2009 were motivated by career opportunities. For those students who indicated that their main study motivation was to be prepared for a vocational opportunity, 31% cited Tourism as their career of choice.

The largest percentage of students seeking career opportunities in the field of tourism (44%) comes from masters and doctoral Biblical Archaeology students. Conversely, only 3% of masters and doctoral students are motivated by a career in pastoral work, while 25% of first-year Biblical Archaeology students begin their studies with a ministerial career in mind.

The research also indicated that only 10% of students studying Biblical Archaeology at masters/doctoral level are actively involved in organised religion, while this figure rises to 58% of those students registered for undergraduate/honours modules. This result
is significant in that it has implications for where the subject of Biblical Archaeology should be housed at the university.

The reason for presenting these research results is to show how many disciplines that are seemingly unrelated, could be grouped together in an interdisciplinary manner and in particular to show the integration of the field of Tourism with many other academic fields.

Some of the current modules in Biblical Archaeology at UNISA already include an element of vocational tourism and can be enhanced and expanded. In addition, a separate, stand-alone module based on both the academic field of tourism as well as the vocational aspects of tourism, could also be introduced as an elective for students who would like a career in tourism.

The last part of the puzzle that we are fitting together with this study is the actual people who we are teaching. If you want to teach and plan your curriculum effectively the lecturer must be knowledgeable about the characteristics and needs of their students. The demographic results of this study provide information to the lecturers concerning age, gender and educational qualifications, much of which differs from the profiles of students at UNISA as well as students from traditional contact universities. Further research as part of this study, was carried out into these characteristics and traits of today’s student, using generational theory and international student trends and will be reported on in subsequent articles.

These results have shown the possible cross disciplinary potential in the fields of Tourism and Archaeology. From this it can be inferred that Tourism could be linked to many other academic disciplines as well, e.g. literature, anthropology, history, cultural and heritage studies, art, drama and music etc. Tourism therefore lives not only as a
specialised field of study but is poised to become part of many interdisciplinary studies.

With this we conclude by saying that just as the study of Tourism is a MIT endeavour, so is the teaching of Tourism, where lecturers will have to juggle a multitude of aspects. Teaching in an ODL environment is not playing Chinese Checkers with singular components and linear moves. It is more like the game of chess with complex components and strategical moves. All of this underscores the fact that hunch-like mind-reading about students’ needs and motivations for study is just not good enough. A concerted and structured effort has to be made to get to know the students who are studying at ODL institutions, and to understand their motivations for taking the courses they chose.

Mind reading is – or at least should be – an exact science.

Notes


Notes on contributors

Jenny Roberts is a senior researcher at the Institute for Open and Distance Learning at the University of South Africa. Her fields of interest are ODL, generational theory, cognitive and learning styles, student profiles, interdisciplinary studies and engaged scholarship research. She is involved in an engaged scholarship program between the
University of South Africa and the South African Department of Education, where she presents cognitive personality style programs to educators, parents and learners. She is also part of a joint study by various universities in South Africa into generational theory in leadership and education.

Ignatius Gous is a professor in the Department of Biblical and Ancient Studies at the University of South Africa. His main interest is the interdisciplinary use of the Cognitive Sciences in various fields – especially textual interpretation, cultural and religious ritual, life skills and neuro-education. He is involved in engaged scholarship projects, namely GenTLE Africa (Generational Theory in Leadership and Education in Africa), PELE² (Parent, Educator and Learner Excellence in Education) and PDE (Positive Discipline in Education). His Open and Distant Learning interests focus on technology-enhanced teaching and learning as well as the changing role of academics in ODL.

References


Annexure 1 Questionnaire

1. What is the highest level course in Biblical Archaeology for which you are registered?
   □ 1st year module(s)
   □ 3nd/3rd year module(s)
   □ Honours
   □ Masters/doctoral

2. What is your gender?
   □ Male
   □ Female

3. What is your highest current educational qualification?
   □ Matric
   □ Certificate/Diploma
   □ Some undergraduate courses
   □ Graduate degree
   □ Postgraduate degree

4. Please tick your appropriate age group
   □ Under 20
   □ 21-30
   □ 31-40
   □ 41-50
   □ 51+

5. Which of the following best describes your reason for studying Biblical Archaeology?
   □ Filler module(s)
   □ Interest only
   □ Career opportunities
   □ Spiritual growth
   □ Other (Please elaborate)
6. Do you think that your studies in Biblical Archaeology have equipped you for a vocational opportunity?
   - Yes definitely
   - To some extent
   - Definitely not
   - Maybe
   - Not sure

7. Which of the following best describes your religious/spiritual position?
   - Atheist
   - Agnostic
   - Uncertain
   - Believer but not active participant
   - Actively involved in organised religion
   - Other (Please elaborate)

8. What is your religious affiliation?
   - Buddhist
   - Hindu
   - Jewish
   - Muslim
   - Catholic
   - Protestant
   - Other Christian
   - I have no religious affiliation

9. Which of the following careers do you think you will be able to pursue once you have completed your studies?
   - Pastoral work
   - Work on archaeological sites
   - Tour Leader/guide
   - Development of archaeological tours
   - Museum work
   - Teaching
   - Other – please elaborate