

**Profile of the
Archaeological Profession
and Education Resources
in Ireland**

A Report to

The Heritage Council

and the

The Institute of Archaeologists of Ireland

by

CHL CONSULTING CO. LTD.

October, 2002

Vers1/smcmm/04/10/02

CONTENTS

	Page No.
<i>Executive Summary</i>	<i>(i)</i>
1. INTRODUCTION	1
1.1 <i>Context</i>	<i>1</i>
1.2 <i>Terms of Reference</i>	<i>1</i>
1.3 <i>Study Methods</i>	<i>2</i>
1.4 <i>Acknowledgements</i>	<i>3</i>
2. PROFILE OF THE ARCHAEOLOGICAL PROFESSION	4
2.1 <i>Number of Archaeologists</i>	<i>4</i>
2.2 <i>Profile of Archaeologists</i>	<i>5</i>
2.3 <i>Employment</i>	<i>8</i>
2.4 <i>Implications for Continuing Professional Development</i>	<i>12</i>
3. EDUCATIONAL PROFILE OF ARCHAEOLOGISTS	14
3.1 <i>Higher Education in Archaeology</i>	<i>14</i>
3.2 <i>Qualifications and Professional Affiliations</i>	<i>15</i>
3.3 <i>Quality of Archaeological Education</i>	<i>18</i>
3.4 <i>Conclusions</i>	<i>21</i>
4. TRAINING NEEDS AND PROVISION	23
4.1 <i>Competencies Required</i>	<i>23</i>
4.2 <i>Training Needs</i>	<i>24</i>
4.3 <i>Current Level of In-Service Training</i>	<i>25</i>
4.4 <i>Conclusions</i>	<i>27</i>
5. THE INTERNATIONAL PICTURE	29
5.1 <i>United States</i>	<i>29</i>
5.2 <i>England</i>	<i>30</i>

6.	FUTURE DEVELOPMENT OF EDUCATION AND TRAINING IN ARCHAEOLOGY.....	35
6.1	<i>Framework.....</i>	35
6.2	<i>Issues to Consider.....</i>	37
6.3	<i>In-Service Training.....</i>	40
6.4	<i>Continuing Professional Development (CPD).....</i>	43
7.	APPENDICES.....	45
	 Appendix One	
	Survey Questionnaire.....	45
	 Appendix Two	
	IMCI Annual Affirmation and CPD Log.....	49

**Profile of the
Archaeological Profession
and Education Resources
in Ireland**

October, 2002

EXECUTIVE SUMMARY

1. INTRODUCTION

There has been a very rapid growth in the level of demand for archaeological expertise during the past ten years. The construction boom and, especially, the rapid pace of infrastructural development, has generated an unprecedented volume of site work for professional archaeologists.

This expansion in demand is placing greater pressure on the capacity of the archaeological sector to deliver the required services. It is evident that there is a need to provide for continuing professional development for archaeologists so that the profession is enabled to meet the challenges it faces, and so that standards of practice continue to improve.

Within this context, The Heritage Council and IAI (formerly IAPA, the Irish Association of Professional Archaeologists) appointed CHL Consulting Co. Ltd. to carry out a study to profile the archaeological profession and education resources in Ireland.

The following is a summary of our main conclusions and recommendations.

2. PROFILE OF THE ARCHAEOLOGICAL PROFESSION

We estimate that, as of March 2002, there were some 650 professional archaeologists working in Ireland, North and South. At that time, there were a further 60 vacancies for archaeologists, bringing total demand to 710.

The following summary profile is drawn from a survey of archaeologists (197 respondents out of a survey population of 416), and a survey of employers of archaeologists carried out for a related study [CHL Consulting, 2002: *The Future Demand for Archaeologists*, The Heritage Council].

- The survey sample divided almost equally between male and female respondents; women archaeologists are in the majority in consulting and contracting, whereas men dominate in academic institutions and the public service [other than local authorities].
- The average age of survey respondents was 37.4 years.
- Archaeologists are dispersed widely throughout the island, but there are significant clusters around Dublin, Cork, Galway and Belfast; overall, 46% live in Leinster and a further 23% in Munster.
- The survey of employers of archaeologists found that the contracting and consulting sector currently employs three-quarters of all professional archaeologists in Ireland; the other leading employers are the universities and the public service.
- Of those employed, almost half stated they were employed on a contract basis with a large proportion of these being employed in the public sector.
- Half of those working in contracting and consulting are employed part-time on short term contracts.
- The majority of those employed on contracts are on short-duration contracts of up to one year.
- Average annual earnings among survey respondents are in the region of €35,680 p.a.; however, the overall average for the profession is probably lower since many of those not covered by the survey are working on a temporary or short term basis at low levels in the contracting / consulting sector.

The main points arising from the profiling study are as follows:

- **Rapid growth in demand for archaeologists:** the number of professional archaeologists working in Ireland has grown rapidly during recent years. This growth has been concentrated in the contracting and consulting sector.
- **Small size of profession:** This has implications for the viability and sustainability of a continuing professional development (CPD) programme and it may prove difficult to maintain continuity.
- **Inflow of archaeologists from overseas:** to help meet the demand for archaeological services, a substantial number of archaeologists have been recruited from overseas.

- **Age-profile:** while there are undoubtedly a lot of young archaeologists working in the contracting/consulting sector who were not covered by our survey, the age-profile of survey respondents suggests that many professional archaeologists have been practising for quite a number of years.
- **Employment structure:** many archaeologists are working on short-term contracts or on a part-time basis, particularly in the contracting/consulting sector.
- **Time:** some 40% of survey respondents work for more than 40 hours per week, and the longest hours at work are spent by individuals in the contracting/consulting sector.
- **Modest earnings:** the average earnings in archaeology are not high.
- **Regional distribution:** archaeologists are spread throughout the country. Although there is a concentration around Dublin and in Leinster generally, the question of access to CPD programmes for all archaeologists is an issue to be considered carefully.

3. EDUCATIONAL PROFILE OF ARCHAEOLOGISTS

The following are the principal conclusions that emerged from the review of the current provision and experience of education in archaeology:

- **Archaeology is a graduate profession:** archaeology is almost exclusively a graduate profession which, to date, has depended on the universities to provide the foundation of knowledge required. Indeed, the majority of survey respondents have taken a post-graduate qualification to assist their entry into the profession. [99% of survey respondents hold a primary degree and 70% have a postgraduate qualification].
- **The Universities provide a broad academic education in archaeology:** archaeology degree courses are popular, as the numbers entering demonstrate. The majority of archaeology students do not intend to pursue a career in archaeology and are not seeking vocational training in archaeology.
- **University education is rated highly by survey respondents:** the fact that the undergraduate degrees are not vocational qualifications is not a criticism of the universities. Indeed, survey respondents expressed a generally high level of satisfaction with their university education.
- **Archaeology graduates must seek further education and training to make the transition to professional practice:** this is also the case with several other professions where postgraduate degrees and diplomas, and training provided by professional institutes, are the normal route for new entrants. However, the survey

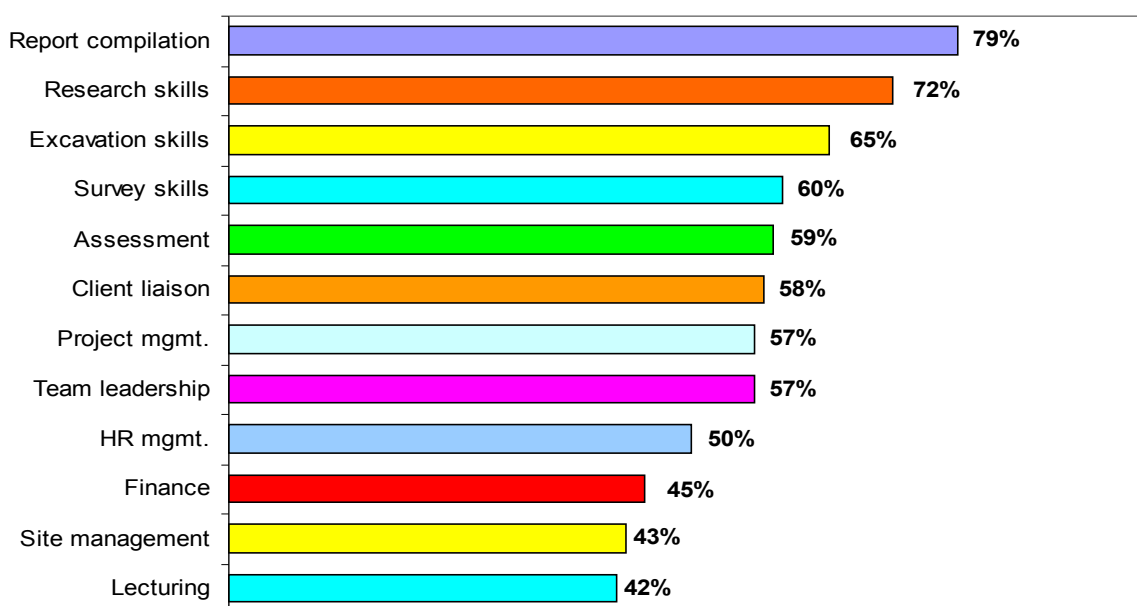
findings suggest that postgraduate qualifications in archaeology do not fill all the requirements of professional practice.

- **There is inadequate provision of professional training for established and aspiring archaeologists:** the survey findings show that the majority of respondents have depended on informal methods to fill the gaps in their training. In general, these have involved putting time into self-education and voluntary work, and learning from on-the-job training. A minority - less than one-third of respondents - have taken extra courses and formal training to develop their professional skills. This is indicative of a weak supply of such training.

4. TRAINING NEEDS AND PROVISION

- **A wide range of competencies are now required of archaeologists in professional practice - Table A:** this is especially true of the contracting and consulting sector where the rapid expansion in the number and scale of projects is giving rise to new demands of archaeologists.

Table A: Main Competencies Required by Archaeologists in their Present Posts



- **There are extensive training needs in fields not covered by existing education in archaeology - Table B:** the university degrees in archaeology are not vocational qualifications and prospective archaeologists need further training to become competent professionals. The training needs are greatest in the contracting and consulting sector where there is a mix of sector specific and non-sector specific training needs.

Table B: Principal Training Needs of Survey Respondents

	Urgent %	Future %	Total %
Technical knowledge updating	50	36	86
Fieldwork methods	39	42	81
Report writing	28	23	51
Project management	27	35	62
General management	27	38	65
Excavation licensing	26	22	48
Budgeting & finance	25	33	58
Research skills	24	28	52
Communication skills	22	28	50
HR management	20	30	50

- **Only a minority of archaeologists have attended training courses during the past 3 years:** despite the high level of need, there is a low level of participation in training courses. Moreover, survey respondents did not give high ratings to the courses that they have attended. There is a very poor supply of courses suited to the needs of archaeologists and most of the courses attended by survey respondents were non-sector specific.
- **Employers of archaeologists provide more encouragement than practical support for in-service training/CPD:** the highest levels of support for training and CPD are found in the public sector and academic institutions. The weakest support is in the contracting and consulting sector which is also where the greatest needs lie.
- **There is no formal training or CPD requirement in the sector:** the absence of this weakens the argument for investment by employers in training.

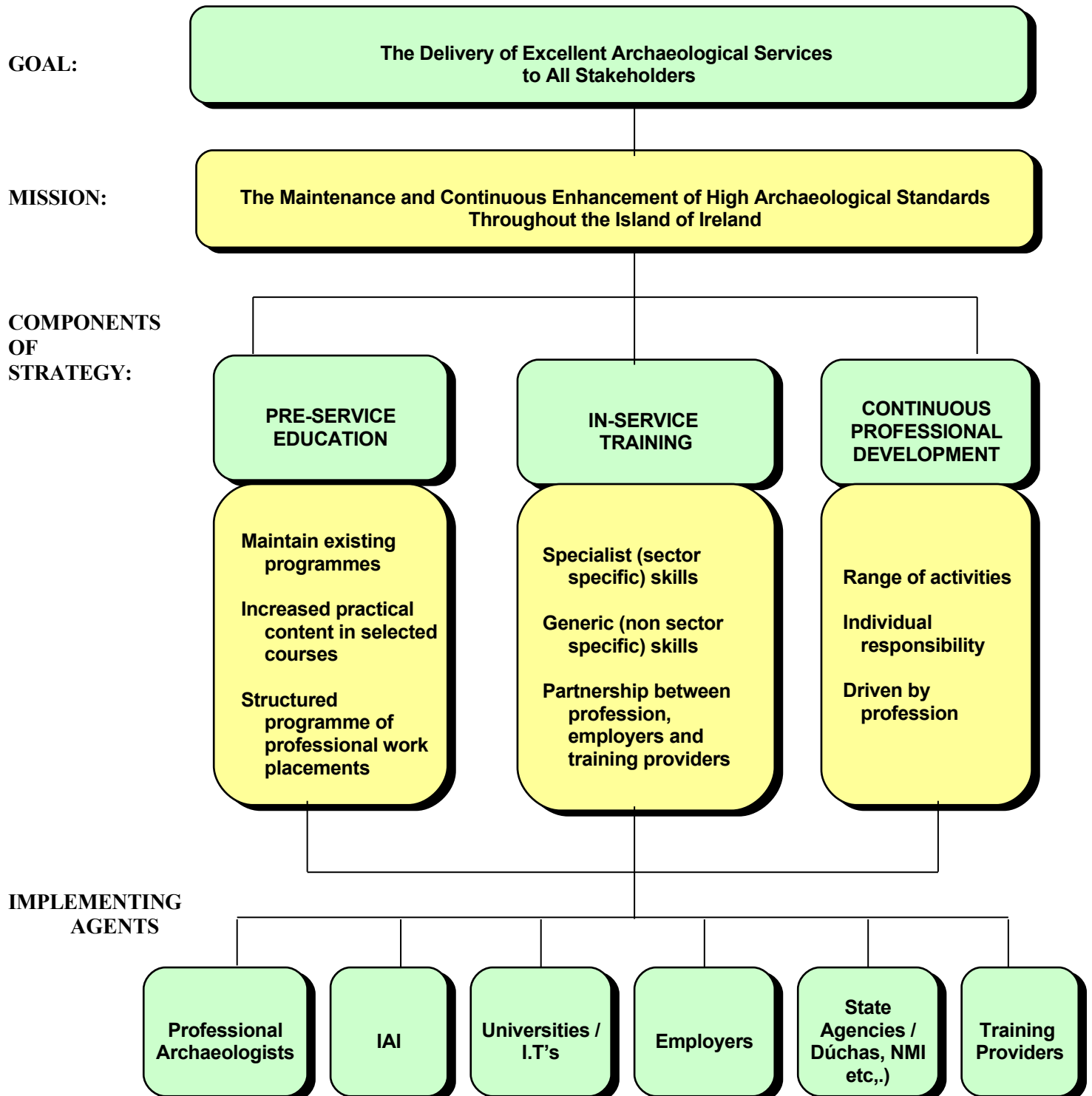
5. FUTURE DEVELOPMENT OF EDUCATION AND TRAINING IN ARCHAEOLOGY

The chart overleaf summarises the broad framework for the development of education and training in archaeology. The main components are outlined in detail in Chapter 6 of the report.

Issues that will need to be considered carefully with relation to the future development of education and training in archaeology are as follows:

- **Scale and Structure of the Profession:** the small scale of the sector affects training provision in a number of ways:
 - low demand levels threaten the viability of training programmes
 - it is difficult to sustain a schedule of courses which is repeated at regular intervals

Figure 1: Framework for the Development of Education and Training in Archaeology



- the financial resources available to IAI will be limited with corresponding limitations on the level of professional support activities and input to CPD that can be delivered.
- **Structure:** the small size of many of the firms in the contracting and consulting sector and, indeed, of many museums, means that their ability to fund training and to allocate staff time to training is very limited. Secondly, the structure of employment in archaeology, whereby a high proportion of people working in the contracting and consultancy sector are on short term contracts and/or working on a part time basis, militates against the provision of, and participation in, training.
- **Geographic Spread:** the population of archaeologists is widely spread throughout the country. Although about half are located in Leinster, there are substantial proportions throughout the rest of the country. This raises the question of access to courses: it is impossible to run courses in every part of the country, irrespective of demand, but distance is a real barrier. Course structures and organisations must take this into account to ensure that this barrier can be overcome.
- **Certification:** Certification is important not only because it offers the possibility of defining standards of professional attainment in archaeology, but also because qualifications offer the potential for career progression. In view of the small size of the archaeology profession in Ireland, the approach to certification of sectoral training must be tempered by a realistic view of potential demand. It is also essential to avoid creating programmes that are beyond people's interest or willingness to pursue.
- **Motivation:** gaining and sustaining widespread interest in, and support for, training and CPD in the profession will depend on the inherent attributes of any training offered, and the delivery strategy implemented. The main considerations are as follows:
 - relevance
 - participation in needs identification
 - quality
 - ease of participation
 - recognition by employers.

7. RECOMMENDATIONS ON EDUCATION AND TRAINING

The following are the principal recommendations of the study with regard to in-service education and training:

- i) The IAI should form a partnership with key organisations with an interest in the issues of training and career development in archaeology:** this partnership would be embodied in an archaeology training advisory committee / forum along the lines of the Archaeology Training Forum in Britain. The key partners would include IAI, the university departments of archaeology, the Heritage Council, the National Museum of Ireland and Dúchas. The committee should identify solutions to training needs, keep current provision under review, seek to obtain financial support for training, and advise on the design and delivery of training in conjunction with academic and professional partners. The committee should also periodically review the training needs of the profession.

- (ii) A training programme that incorporates responses to the most urgent needs should be designed in conjunction with an academic partner under the aegis of this committee:** in view of the small size of the sector, there is really only room for one university department of archaeology to take the lead on this, although consideration might be given to involving others, depending on the specific skills required. Based on the geographical distribution of archaeologists, UCD is a candidate institution to take the lead, while others might deliver components of the overall programme in accordance with their fields of specialisation.

- (iii) An integrated, certified programme covering the key areas of need (both specialist and generic) could be designed for delivery on a modular basis:** the first priority is to ensure that courses are made available to meet the identified needs. However, it would be possible to take this a step further by integrating the training courses into a programme structured in discrete modules. Each module would address a specific need, and would be certificated. The certificates could then be accumulated into an overall professional qualification under the Accumulated Credits and Certification of Subjects approach. The modules should be designed to fit into the schedules of people in employment e.g. in sets of three or four 2-day sessions.

- (iv) The courses should be delivered through the adult and continuing education system:** this will allow greater flexibility in design and delivery. This is an important consideration since it is unlikely that the programme could be run viably on a continuous basis. The small size of the market means that the demand for training in particular subjects may be satisfied after just a small number of iterations, and there may be a long pause before demand rebuilds to a level at which running courses in those subjects becomes viable again. It will therefore be necessary to continuously monitor demand levels.

- (v) **A database of providers of non-sector specific training (e.g. on general management, finance, human resource management etc.) should be compiled by the IAI for reference by members:** entry onto the database should be subject to a basic screening or validation process covering the professional and corporate status of training providers, professional affiliations and accreditations, qualifications and track record.
- (vi) **IAI should appoint a director of education and training to coordinate and drive the initiative:** the role of the director of education and training would broadly be to:
- initiate the establishment of the archaeology training advisory forum, and to assist it with its work
 - build on the research in this report by further refining the training needs analysis, and devising a mechanism for periodically monitoring these needs
 - work with academic and professional partners in designing appropriate responses to specialist archaeological training needs
 - identify appropriate providers of generic training
 - design a suitable CPD system for the profession (see Section 6.4)
 - promote participation in training programmes and CPD in the profession.

The director of education and training should report to the Board of the IAI. The position requires, inter alia, knowledge of the stakeholders, knowledge of the education system and excellent communication skills. In order to attract the right level of experience and skill with the available budget, it might be filled on a part-time consultancy basis.

- (vii) **The profession should take primary responsibility for funding its own training. However, in view of the limited resources of many in the profession, external financial support should be found both for the IAI director of education and training and for the design and development of training to meet specialist needs, including the production of training materials:** the actual delivery costs could then be kept to a minimum. Employers should then pay for the costs of participation by their staff in this training, as is the norm in most professions. The possibility for levying reduced costs on individual, self-employed archaeologists, who are on low incomes, should be investigated. A budget of c. €50,000 p.a. will be required for the director of education and training, (excluding office overheads). A further sum of c. €25,000 should be provided for support services and the design and development of training programmes.
- (viii) **The IAI should introduce a relatively simple Continuing Professional Development system with a view to promoting the maintenance and further development of professional competencies among members:** the system should be simple to administer and should not be so onerous as to deter archaeologists from joining or remaining in the profession. A model similar to that used by the Institute of Management Consultants might be considered - see Section 6.4 for details.

1. INTRODUCTION

1.1 CONTEXT

There has been a very rapid growth in the level of demand for archaeological expertise during the past ten years. The construction boom and, especially, the rapid pace of infrastructural development, has generated an unprecedented volume of site work for professional archaeologists.

This expansion in demand is placing greater pressure on the capacity of the archaeological sector to deliver the required services. It is evident that there is a need to provide for continuing professional development for archaeologists so that the profession is enabled to meet the challenges it faces, and so that standards of practice continue to improve.

The Heritage Council and the Institute of Archaeologists of Ireland (IAI) have recognised the need for training and professional development in the sector. Indeed, the Heritage Council's Operational Plan for Archaeology calls for the development of in-service training for archaeologists and associated specialists in partnership with IAI. This matter needs to be approached in a structured way so that available resources are directed to meeting priority training needs. The first step in planning a training strategy for the sector, therefore, is to determine the scale and nature of the issues involved. This requires that an accurate profile of the archaeological profession in Ireland be established and that training needs be identified and prioritised.

Within this context, The Heritage Council and IAI (formerly IAPA, the Irish Association of Professional Archaeologists) appointed CHL Consulting Co. Ltd. to carry out a study to profile the archaeological profession and education resources in Ireland. We are pleased to present our findings, conclusions and recommendations in this report.

1.2 TERMS OF REFERENCE

The following are the objectives of the study as stated in the Terms of Reference issued by The Heritage Council and IAI.

- **Part 1: Profiling the profession**

This survey should address:

- The scale of the archaeological profession in Ireland
- Its distribution
- Age and gender profile
- Levels of academic and vocational education
- Levels of professional experience
- Archaeological organisations and main employers

- Work descriptions and profiles of archaeological posts
- Training policies within archaeological organisations and support for these
- Working conditions, hours, job security, salaries and benefits
- Career development issues
- Specialisation and its issues.

- **Part 2**

- To survey third-level courses or systems of archaeological training for archaeologists and associated specialists in Ireland.
- To survey the recipient bodies of the graduates from these institutions, seeking their views of the quality of the graduates, courses, etc.
- To analyse the current competence requirements of Irish archaeology and identify any gaps, areas for improvement, etc.
- To propose frameworks for the future development of archaeological education and training, including within the work environment and in the context of continuing professional development.

1.3 STUDY METHODS

The study commenced in September, 2001, and the bulk of the research work was completed between then and the end of 2001.

The research programme was then extended for the purposes of a second, complementary study, which addressed the issue of the future demand for archaeologists¹. The preliminary findings and conclusions of both studies were issued in March, 2002.

The research programme for this study comprised the following:

- desk research
- survey of archaeologists
- consultative programme
- international research.

- **Desk Research**

We gathered and studied a wide range of reports, papers and other documents of relevance to the subject. We were also able to draw on training needs analyses and continuous professional development plans prepared for different sectors by CHL and others.

¹ CHL Consulting Co. Ltd. (2002): “*The Future Demand for Archaeologists in Ireland*”, The Heritage Council

- **Survey of Archaeologists**

The most important part of the research with respect to profiling the profession and identifying training needs was the survey of archaeologists. A detailed questionnaire was drafted and piloted with IAI. The questionnaire was then finalised and sent out to a list of 359 archaeologists - 304 in the Republic and 55 in Northern Ireland. The list of names was assembled from lists provided by Dúchas and IAI. A further 60 questionnaires were distributed on our behalf by SIPTU. Making due allowance for those persons who appeared on more than one list, the total mailing covered 416 persons.

In all, 197 replies were received, representing a very good response rate of 47.4%. The findings of the survey are used extensively throughout the report. A copy of the questionnaire is provided in the appendices.

In addition to the survey of archaeologists, the study team also drew on the findings of the survey of employers of archaeologists undertaken as part of the study of the future demand for archaeologists in Ireland.

- **Consultative Programme**

In consultation with The Heritage Council and IAI, a list of key contacts was drawn up. This list was subsequently expanded during the course of the study as requirements for further inputs became apparent. The consultative programme covered the university departments of archaeology, a sample of archaeological consultancies, and the main government agencies of relevance to the sector, including Dúchas and The National Roads Authority.

- **International Research**

The study team was assisted by Dr. Robert Killick, a leading British archaeologist, who undertook research on archaeological training and development in Britain and elsewhere. Dr. Killick's findings are presented in Chapter 5.

1.4 ACKNOWLEDGEMENTS

As the summary of the methods employed in carrying out this study indicates, we relied heavily on the cooperation and contribution of numerous individuals and organisations. Their inputs of hard data, as well as informed views and recommendations, were essential to the study. We wish to record our sincere thanks to all who contributed so willingly, including the large number of people who responded to the survey.

2. PROFILE OF THE ARCHAEOLOGICAL PROFESSION

The profile of the archaeological profession in this report is based on the responses to the survey of archaeologists undertaken by CHL during the autumn of 2001. The number of archaeologists, and their personal and professional profiles, including employment, are detailed in this chapter. Data on education, professional competencies and training needs are provided in Chapter 3.

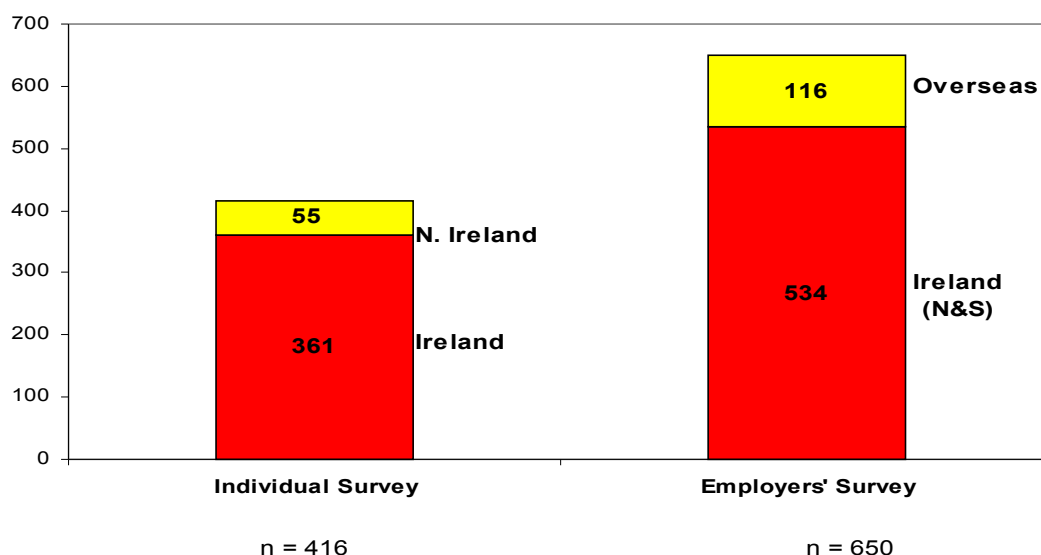
2.1 NUMBER OF ARCHAEOLOGISTS

We estimate that, as of March 2002, there were some 650 professional archaeologists working in Ireland, North and South. At that time, there were a further 60 vacancies for archaeologists, bringing total demand to 710. Employment in the archaeology sector has increased greatly in recent years, primarily due to a rapid increase in excavation work associated with large scale infrastructural development and urban renewal programmes. (The number of new excavation licences issued annually rose from 123 in 1990 to 1,227 in 2001, and 1,053 during the first six months of 2002.)

The estimated number of archaeologists currently working in Ireland is drawn from a survey of employers of archaeologists carried out by CHL in early 2002 for a related study (*"The Future Demand for Archaeologists"*, prepared for The Heritage Council). This survey disclosed a much larger number of archaeologists at work than the 416 included on the lists assembled by IAI, Dúchas and SIPTU, which were used for the profiling survey - see Figure 2.1.

Half of the difference of 234 is accounted for by archaeologists who have come from overseas to work in Ireland, most notably in the consulting sector - our survey of employers found that some 116 of the 650 archaeologists currently at work come from overseas. The balance of 118 archaeologists who are not featured on the current IAI or SIPTU membership lists, nor included on the Dúchas list of licensable archaeologists, are presumably Irish. However, they do not appear to be part of the established professional structures. Some may be graduates of recent years, who have yet to commit themselves to a long-term career in archaeology, while others may not necessarily be graduates of archaeology courses.

Figure 2.1: Number of Professional Archaeologists in Ireland



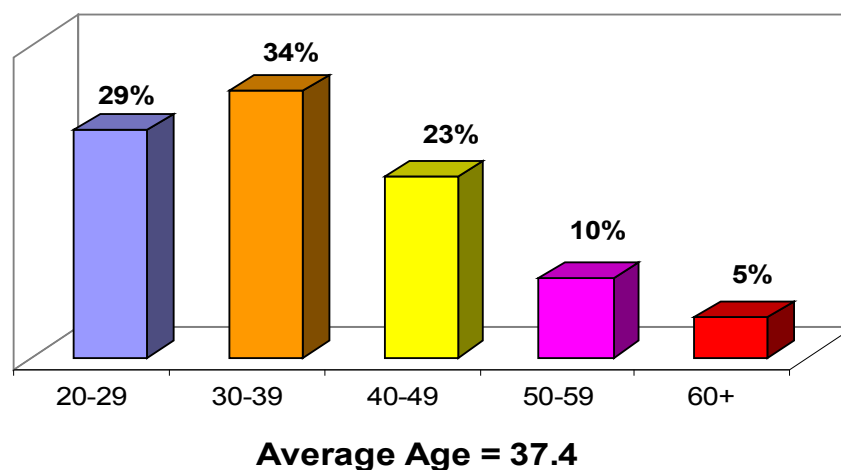
Notes: the Individual Survey of Archaeologists covered 416 persons who are included on one or more of the following: IAI and SIPTU membership lists and the Dúchas list of licensable archaeologists.

2.2 PROFILE OF ARCHAEOLOGISTS

2.2.1 Age

The age distribution of survey respondents is highlighted in Figure 2.2. Six out of every ten respondents were under 40 years old and, as in Britain, the profession is dominated by people in their 20s, 30s and 40s. The average age of respondent was 37.4 years, which is almost identical to the profile in Britain - the Institute of Field Archaeologists found that, in 1998, the average age of British archaeologists was 36.

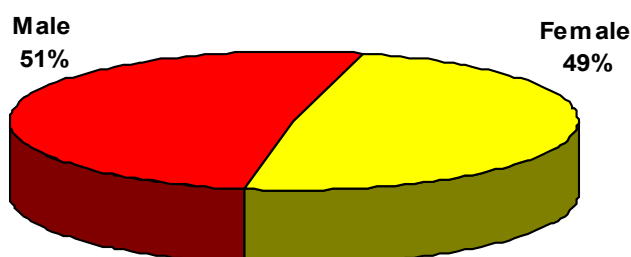
Figure 2.2: Age Distribution of Survey Respondents



2.2.2 Gender

The survey sample split almost equally between male and female respondents - see Figure 2.3. In terms of the sector of employment, women archaeologists are in the majority in consulting and contracting, and in local authorities, whereas men are in the majority in academic institutions and the public service (other than local authorities).

Figure 2.3: Gender of Survey Respondents



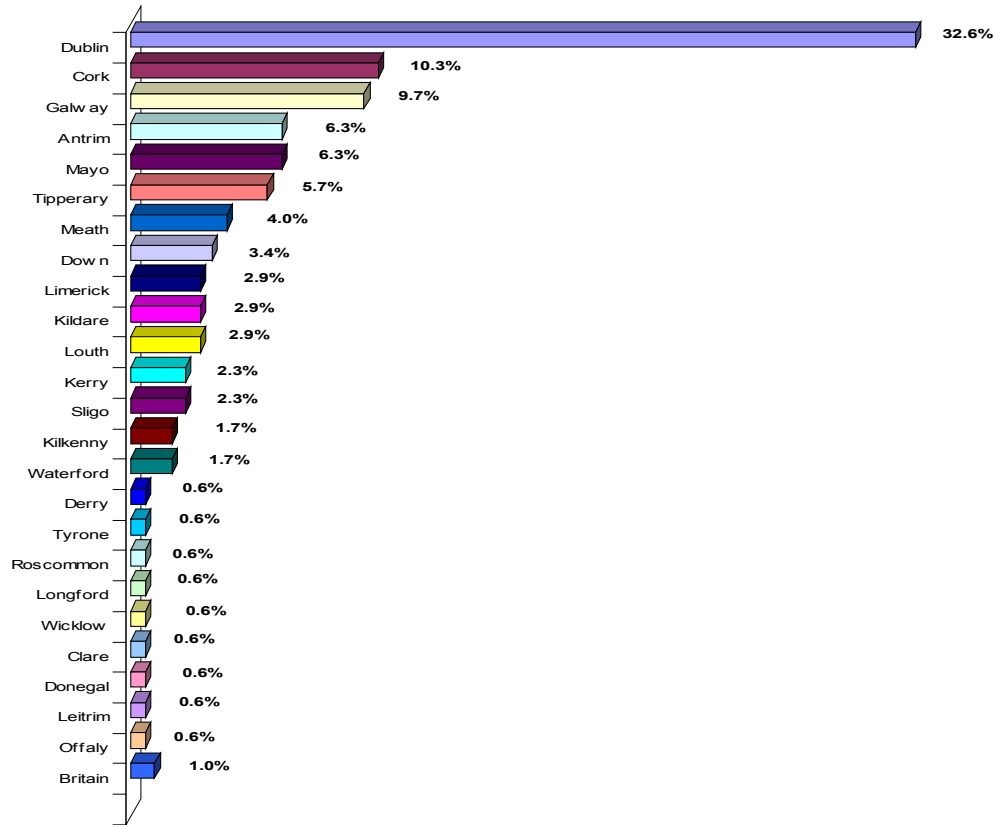
In Britain, the profession appears to be dominated by men who account for two-thirds of the population of archaeologists. However, women again account for a majority (56%) of independent archaeological consultants.

2.2.3 County of Residence

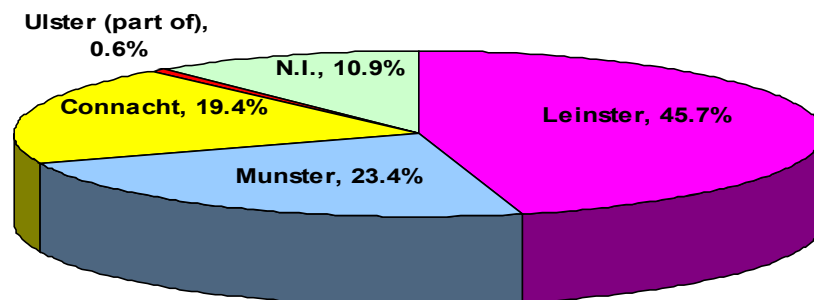
As indicated in Figure 2.4 below, archaeologists are widely spread throughout the island, although there are significant clusters around the cities where university departments of archaeology are located i.e. Dublin, Cork, Galway and Belfast. The largest concentration is in Dublin where almost one-third of respondents live. Significant numbers also live in counties Cork, Galway, Antrim, Mayo and Tipperary.

In regional terms, almost half of the respondents live in Leinster and a further quarter in Munster, with Connacht and Northern Ireland accounting for 19% and 11% respectively. The proportion resident in Northern Ireland appears low but it is likely that there is a sizeable number of archaeologists from Northern Ireland living and working in the Republic at present.

**Figure 2.4: County of Residence of Respondents
(n=175)**



Area of Residence

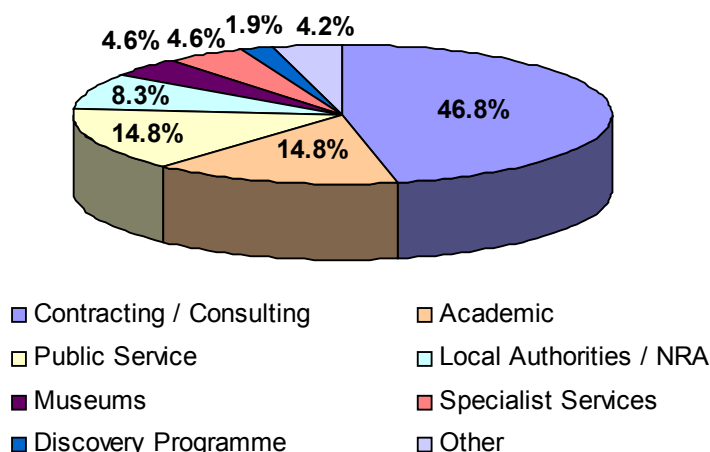


2.3 EMPLOYMENT

2.3.1 Field of Employment

The fields of work or sectors in which survey respondents are employed are summarised in Figure 2.5. Contracting and consulting constitute by far the largest sector, accounting for almost half of the survey respondents. This is a much larger share than in Britain where just one-third of professional archaeologists are engaged in contracting and consulting. The other leading sectors are the universities and the public service (including Dúchas, DOENI etc.), both of which account for 15% of respondents. Museums, local authorities, the National Roads Authority and the Discovery Programme are the other main areas of employment.

Figure 2.5: Field of Employment

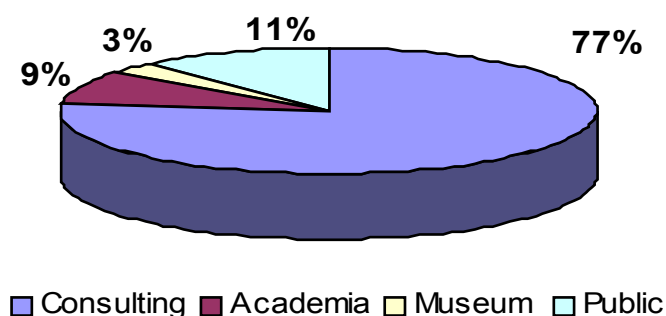


A number of respondents indicated that they work in more than one field. Thus, the majority of those stating that they work in the supply of specialist services (i.e. conservation, laboratory work etc.) also stated that they work as contractors / consultants. Similarly, a number of academics undertake consultancy work.

The distribution of professional archaeologists by sector of employment depicted in Figure 2.5 is not representative of the entire population of archaeologists currently working in Ireland - i.e., the total of 650 (see Section 2.1). The survey of employers of archaeologists, carried out by CHL, found that contracting and consulting account for three-quarters of all professional archaeologists in Ireland, with the universities and the public sector accounting for most of the rest - see Figure 2.6. It is likely, therefore, that

the findings of the survey of archaeologists are applicable only to the 416 individuals covered by the survey, and that all or virtually all of the balance of 234 archaeologists are employed in the contracting and consulting sector. Half of the 234 have come from overseas specifically to work on contracts related to infrastructural development, most notably the road projects and the gas pipeline.

**Figure 2.6: Employment Demand by Sector
(Survey of Employers)**



2.3.2 Status of Employment

One quarter of survey respondents stated that they were self-employed, with the remainder being employees (Figure 2.7). It is likely that a substantial number of those describing themselves as self-employed are working in the contracting / consulting sector.

Figure 2.7 also shows the distribution of survey respondents between full-time and part-time employment. Only 9% of respondents described themselves as part-time workers and this contrasts sharply with the findings of the survey of employers which put 36% of employees in the part-time category (Figure 2.9). Virtually all of these are in the contracting/consulting sector and it is probable that they include many or most of the 234 individuals who were not covered by the survey of archaeologists. It is also likely that many of those in the contracting / consulting sector who are described as part-time are actually on contracts.

Figure 2.7: Distribution of Survey Respondents by Status of Employment

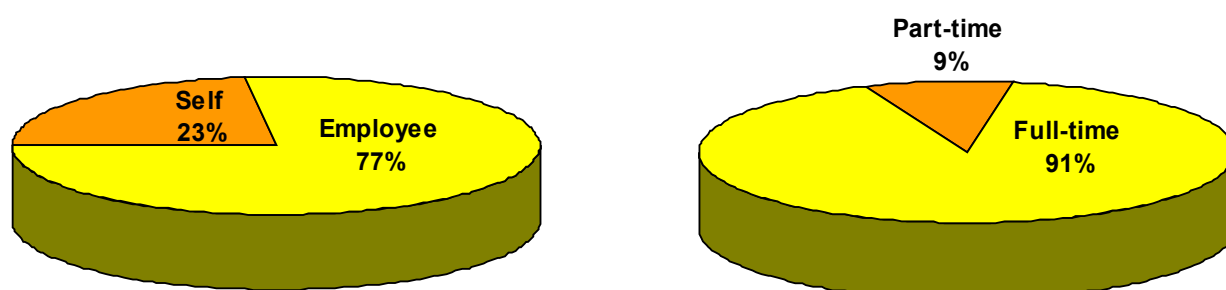
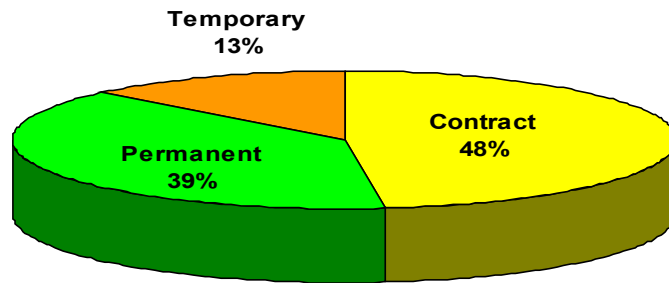
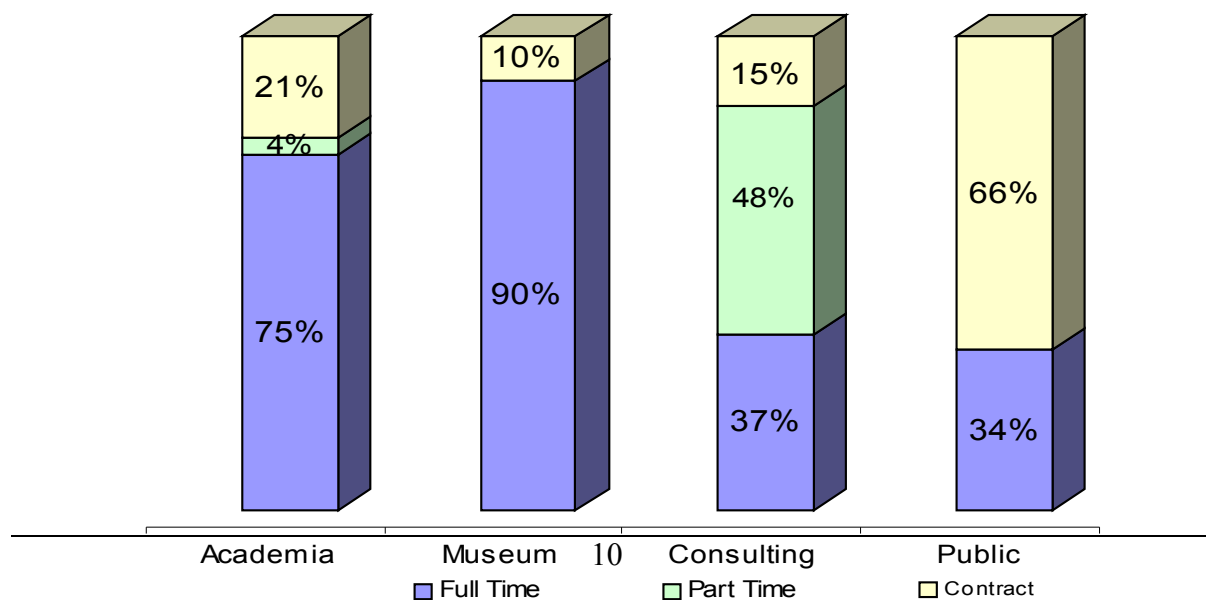


Figure 2.8: Distribution of Survey Respondents by Type of Employment



Of those employed, almost 50% stated that they were on contract, and 13% described themselves as being in temporary employment (Figure 2.8). A minority (39%) of respondents are in permanent employment. A large proportion of those in contract employment work in the public sector, as disclosed by the survey of employers - see Figure 2.9.

**Figure 2.9: Status of Employment by Sector
(from Survey of Employers)**



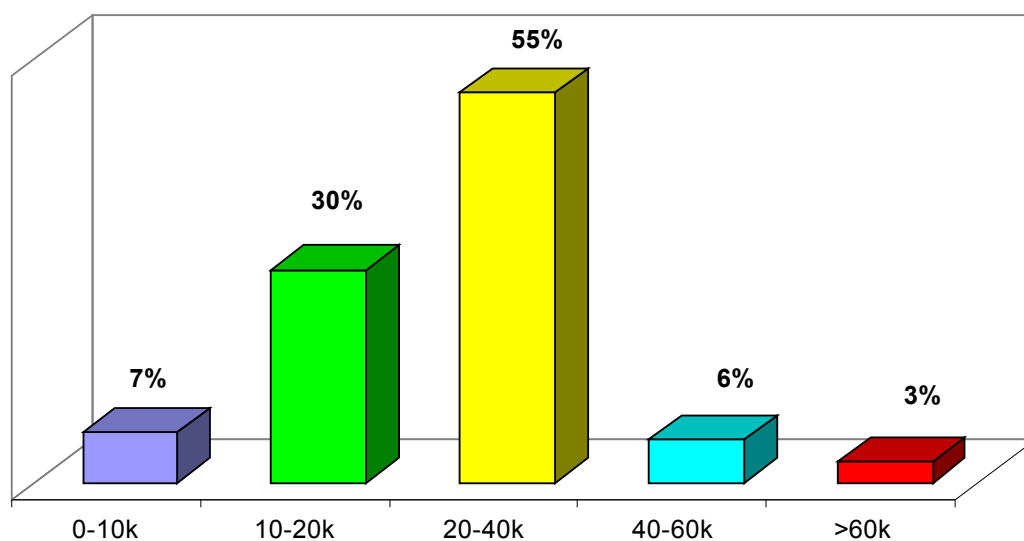
In terms of experience, 57% of respondents have been in their present posts for less than 3 years, with 17% being there for less than 12 months. At the other end of the scale, 17% have been in their present posts for more than 10 years. The average length of time to date in a present post is 5.6 years.

Many of those (46%) working on contracts are on short-duration contracts of up to one year. A further quarter are working on either 3-year or 5-year contracts. The average duration of contract amounts to 1.9 years. Undoubtedly, the relatively large number of archaeologists working on short-term contracts in the contracting / consulting sector shortens the overall average contract duration.

2.3.3 Terms of Employment

The average earnings from archaeology, based on data from 96 respondents, amounted to €35,680 (£28,100) in 2001. The distribution by salary bracket is illustrated in Figure 2.10. This shows that only a small percentage of archaeologists earn more than €50,790 (£40,000), and the majority probably earn less than €38,090 (£30,000). Indeed, since many of those who were not covered by the survey are working on a temporary or short term basis at low levels in the contracting / consulting sector, it is probable that the overall average earnings in archaeology are lower than the €35,680 indicated by the survey respondents.

Figure 2.10: Respondents' Earnings from Archaeology



**Average: £28,100 / €35,680
(U.K. 1998: £17,079 Stg / IR£20,100)**

In Britain, the profiling survey of archaeologists carried out for the Institute of Field Archaeologists found that the average full-time salary for archaeologists was Stg. £17,079 in 1998. This was 11% below the national average for all occupations of Stg. £19,167. The figure of Stg. £17,079 equated to IR£20,100 in 1998 and would have to have increased by 12% per annum to reach IR£28,100 by 2001. Such a rate of increase was not uncommon in many professions in Ireland during that period, but would certainly have been higher than the increases paid in Britain, reflecting the high rate of growth in demand for archaeologists in Ireland.

Survey respondents work on average for 40 hours per week, slightly more than the average of 38 hours worked by archaeologists in Britain. Some 55% of respondents work for between 31 and 40 hours per week, and almost 40% work for more than 40 hours. The longest hours are worked by those in the contracting / consulting sector, but a significant proportion of the respondents in the academic, museum and public administration sectors stated that they put in more than 40 hours per week.

In terms of career prospects, just over half (54%) of the respondents stated that there were prospects for promotion or career advancement in their present employment. The balance of 46% put forward a variety of reasons as to why there were no prospects for career advancement in their present position. The most frequently cited obstacles were

- being self-employed
- working on a short-term contract
- already at the top of the scale / organisation
- no opportunities due to static nature of organisation
- no career structure in the sector.

2.4 IMPLICATIONS FOR CONTINUING PROFESSIONAL DEVELOPMENT

The current trends in archaeology in Ireland, and the profile of archaeologists, have implications for the design and delivery of a programme for continuing professional development (CPD). The main points are as follows:

- **Rapid growth in demand for archaeologists:** the number of professional archaeologists working in Ireland has grown rapidly during recent years. This growth has been concentrated in the contracting and consulting sector, driven by the needs of major infrastructural projects, notably the roads programme and the gas pipeline, and urban development schemes. This expansion and the emphasis on field work is giving rise to significant training needs.
- **Small size of profession:** although the number of archaeologists working in Ireland has expanded rapidly during recent years, it remains a small profession in absolute terms. This has implications for the viability and sustainability of a CPD programme and it may prove difficult to maintain continuity.
- **Inflow of archaeologists from overseas:** to help meet the demand for archaeological services, a substantial number of archaeologists have been recruited from overseas. They may have specific training needs relating, inter alia, to Irish archaeology, relevant legislation and the requirements for licensing.
- **Age-profile:** while there are undoubtedly a lot of young archaeologists working in the contracting/consulting sector who were not covered by our survey, the age-profile of survey respondents suggests that many professional archaeologists have been practising for quite a number of years. It can be difficult to persuade senior

professionals of the benefits of engaging in CPD programmes, even if they badly need to update or expand their range of skills.

- **Employment structure:** many archaeologists are working on short-term contracts or on a part-time basis, particularly in the contracting/consulting sector. This can militate against participation in CPD programmes, especially if employers do not support it.
- **Time:** some 40% of survey respondents work for more than 40 hours per week, and the longest hours at work are spent by individuals in the contracting/consulting sector. Making time available for CPD is an issue where the pressure of work demands heavy time commitments.
- **Modest earnings:** the average earnings in archaeology are not high. This has implications for the pricing of CPD programmes and the need to secure commitments from employers to provide financial support.
- **Regional distribution:** archaeologists are spread throughout the country. Although there is a concentration around Dublin and in Leinster generally, the question of access to CPD programmes for all archaeologists is an issue to be considered carefully.

3. EDUCATIONAL PROFILE OF ARCHAEOLOGISTS

In this chapter, we review the current educational profile of archaeologists in Ireland, and report on their assessment of their education. To place this in context, the current provision of higher education in archaeology in Ireland is summarised in Section 3.1.

3.1 HIGHER EDUCATION IN ARCHAEOLOGY

Undergraduate and postgraduate degrees in archaeology are offered by Departments of Archaeology in four universities - UCC, UCD, UCG and Queen's University, Belfast - while the University of Ulster offers an M.Sc. in maritime archaeology at its Coleraine campus. The Institute of Technology in Sligo had planned to introduce a new undergraduate science degree in archaeology in 2002, but this is now on hold. In addition to these, we understand that there is a significant archaeological component in the undergraduate programmes offered by the Department of History in NUI, Maynooth, the Department of Medieval History in Trinity College, Dublin, and the Heritage Studies course at Galway-Mayo Institute of Technology.

A summary of the undergraduate and postgraduate programmes, excluding PhD's, currently available is provided in Table 3.1. The average annual output from these courses is in the region of 230-240 graduates plus a further 30-40 postgraduates. While no data are available on the career choices of graduates from archaeology courses, it is estimated that up to 20% - i.e. 50 to 60 - initially pursue a career in archaeology. This anecdotal evidence suggests that many subsequently leave the profession for a variety of reasons including disenchantment with the nature of the work they find themselves doing, unattractive employment terms and poor career prospects.

The range of degree courses available offers a good choice to prospective students. They also provide capacity far in excess of the opportunities available at entry level into the profession. However, as noted above, only a small proportion of graduates seek to pursue a career in archaeology.

The undergraduate courses cater for the interests of a wide audience and are broadly-based and academic rather than vocational in orientation. Although all of the degree programmes include fieldwork modules, the extent of these is quite limited since such practical work has significant staffing and cost implications. Graduates who wish to pursue a career in professional archaeology must therefore seek to develop their practical skills at postgraduate level or through on-the-job training (whether formal or informal).

The Institute of Technology Sligo had planned to introduce a new 4-year Bachelor of Science degree in 2002 which specifically addressed this gap in the current provision of higher education in archaeology by focusing heavily on practical project work. It would have been interesting to see how the market responded to this offer, but the course was put on hold.

**Table 3.1: Higher Education in Archaeology
(excluding PhD's)**

Educational Institution	Undergraduate Programmes	Postgraduate Programmes
University College Cork	<ul style="list-style-type: none"> • B.A. in Archaeology, (single and joint honours) 	<ul style="list-style-type: none"> • M.A. in archaeology
University College Dublin	<ul style="list-style-type: none"> • B.A. in Archaeology (joint honours) • Foundation level course in Archaeology for B.A. modular (evening) degree 	<ul style="list-style-type: none"> • M.A. in Landscape Archaeology • M.A. in the Archaeology of Art and Architecture • Higher Diploma in Celtic Archaeology • M.Litt. in Archaeology
University College Galway	<ul style="list-style-type: none"> • B.A. in Archaeology (joint honours) • Diploma in Archaeology 	<ul style="list-style-type: none"> • M.A. in Landscape Archaeology* • M. Litt. in Archaeology (2-year research degree)
Queen's University Belfast	<ul style="list-style-type: none"> • B.A. in Archaeology (single and joint honours) • B.Sc. in Archaeology -Palaeontology (single and joint honours) • B.Sc. in Environmental Archaeology • B.Sc. in Paleobiology • Certificate in Celtic Studies 	<ul style="list-style-type: none"> • M.A./Diploma in Archaeology • M.Sc./Diploma in Environmental Archaeology • M.Phil. in Archaeology (research degree)
University of Ulster		<ul style="list-style-type: none"> • Diploma/M.Sc. in Maritime Archaeology

* To be introduced in 2002

3.2 QUALIFICATIONS AND PROFESSIONAL AFFILIATIONS

3.2.1 Academic Qualifications

There is a high level of educational attainment among archaeologists. 99% of the respondents hold a primary degree and 70% have a postgraduate qualification. As indicated in Table 3.2, a very wide range of qualifications were listed by respondents. By far the most frequently mentioned primary and postgraduate degrees were Bachelor of Arts and Master of Arts respectively, and a number of points may be made in relation to these:

- **Bachelor of Arts (BA)**
 - Only 69 of those holding a B.A. noted the subjects of their degree; of these, 38 have a joint honours degree, combining archaeology with another subject, and 22 hold a single honours degree in archaeology.
 - 40% of respondents with a B.A. completed their degree at UCD, and a quarter and a sixth completed their degrees at UCC and UCG respectively.
 - 5% qualified at universities in Northern Ireland and 9% at universities in Britain.

- Over half (56%) of respondents qualified prior to 1990, with the remaining 45% qualifying within the past 12 years.

Table 3.2: Educational Qualifications of Survey Respondents

Qualifications	No. of Respondents (n=196)	%
B.A. - Bachelor of Arts	185	94
M.A. - Master of Arts	92	47
Ph.D. / D. Phil / D. Litt.	24	12
Higher Diploma in Education	13	7
B. Sc. - Bachelor of Science	10	5
M. Litt - Master of Letters	6	3
Dip. EIA Management	6	3
M.Sc. - Master of Science	5	3
B.Soc.Sc. - Bachelor in Social Science	3	2
Master in Urban & Building Construction	3	2
Master in Urban & Regional Planning	2	1
Dip. Heritage Management	2	1
Higher Diploma in Computer Science	2	1
Diploma in Practical Archaeology	2	1
Diploma in Librarianship & Archives	2	1
Other Diplomas	8	4
Other Certificates	10	5

- **Masters (M.A.)**

- Over half of those who noted the subject of their master's degree studied archaeology.
- Almost half completed their masters at UCD, with a quarter stating UCC. Those who stated TCD and UCG accounted for 8% and 6% of respondents respectively. 5% qualified at universities in Northern Ireland, 8% at universities in Britain and 1% each in the US and the Netherlands.
- Six out of every 10 respondents with a master's completed their degree within the past 10 years.

3.2.2 Current Participation in Further Education

Thirty-one respondents (16% of the total) are currently pursuing a further qualification. Of these, one-third (10) are taking a doctorate, a quarter (7) are reading for a master's degree, and the remainder are taking a variety of courses, most of which are of practical application to their work. The complete list of courses is provided in Table 3.3.

Table 3.3: Current Participation in Certified Courses by Respondents

Qualifications Sought	Actual No. of Respondents
Ph. D.	10
ECDL	3
PADI Master Scuba Diver	2
Certificate in Local Government	2
M. Phil in Archaeology	1
MUBC	1
MA in Literature	1
MA in Paleo-Archaeology	1
MA in Local History	1
MA in Archaeology & Heritage	1
MBA	1
French	1
Certificate in Health & Safety at Work	1
Certificate in GIS Systems	1
Management Course	1
Desktop Publishing	1
German Language	1
Biodiversity & Irish Landscape	1

3.2.3 Membership of Professional Bodies

Respondents to the survey are members of a wide ranging list of professional bodies and other organisations. Almost 90% (128 respondents) are members of the IAI (formerly IAPA). The most frequently mentioned body apart from the IAI was the Royal Society of Antiquaries of Ireland - RSAI - which accounts for 9% of respondents. Respondents who are members of multiple bodies tend to be working in academic institutions, the public service and museums. The full list of professional bodies mentioned by survey respondents is provided in Table 3.4 below.

Table 3.4: Membership of Professional Bodies

Professional Body	% of Respondents who are Members of a Professional Body (n=145)
IAI	88%
Royal Society of Antiquaries of Ireland (RSAI)	9%
Institute of Field Archaeologists	6%
Royal Irish Academy	4%
Royal Society of Antiquaries	4%
Society for Historical Archaeology	4%
Society for Post Medieval Archaeology	3%
SIPTU	3%

1% response rate:

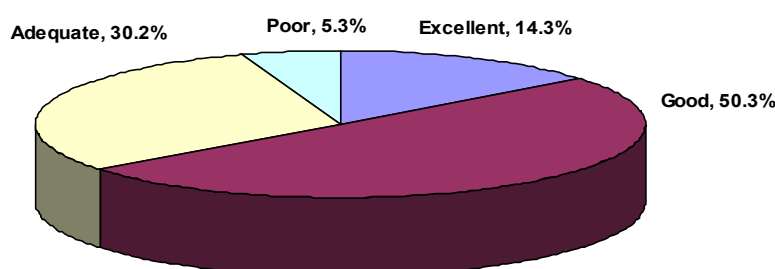
- European Association of Archaeologists (EAA)
- Nautical Association Society (NAS)
- Irish Maritime Archaeological Society
- RHA
- German Archaeological Institute
- Society of Irish Forestry
- Institute of Supervision and Management
- Irish Museums Association
- American Association of Museums
- Institute of Geologists in Ireland
- Heritage Interpretation Association
- Palaeopathology Association
- Association of Environmental Archaeologists
- ICOMOS
- American Association of Physical Anthropologists (AAPA)
- British Association of Biological Anthropologists & Osteoarchaeologists (BABAO)
- Society for the Protection of Ancient Bogs
- Irish Post Medieval Archaeology Group (IPMAG)
- Industrial Heritage Association of Ireland
- Group for the Study of Irish Historic Settlement
- Glass Society of Ireland
- RIBA
- Academic Europa.

3.3 QUALITY OF ARCHAEOLOGICAL EDUCATION

3.3.1 Overall Perceptions

As illustrated in Figure 3.1 below, survey respondents have a generally favourable opinion of their archaeological education. Half of them stated that the quality of the archaeological education they received was 'Good' and a further 14% stated that it was 'Excellent'. Slightly more than 30% described their education as 'Adequate' and only 5% said that it was 'Poor'.

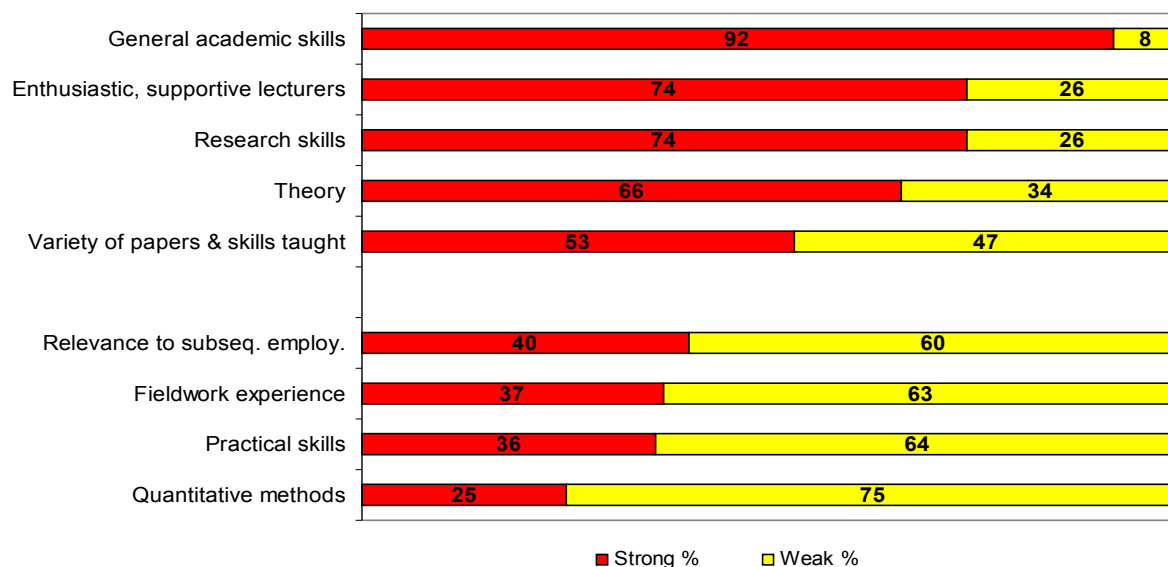
Figure 3.1: Quality of Education Received



3.3.2 Strong and Weak Points of Archaeological Education

Respondents were asked to highlight the strong and weak points of the archaeological education that they received. Their responses are listed in Figure 3.2.

Figure 3.2: Strong and Weak Points of Archaeological Education



The nine points identified in Figure 3.2 can be divided into two groups as shown in the chart. There is a generally high level of satisfaction with the upper group of points which refer largely to the inherent interest and academic strength of the archaeological education received by survey respondents. On the other hand, the weaknesses identified centre around the practical content of their education in terms of fieldwork skills and experience, quantitative methods and relevance to employment.

On average, 93% of survey respondents classified each of the points listed in Figure 3.2. A much smaller number of respondents mentioned additional points, and these are listed in Table 3.5.

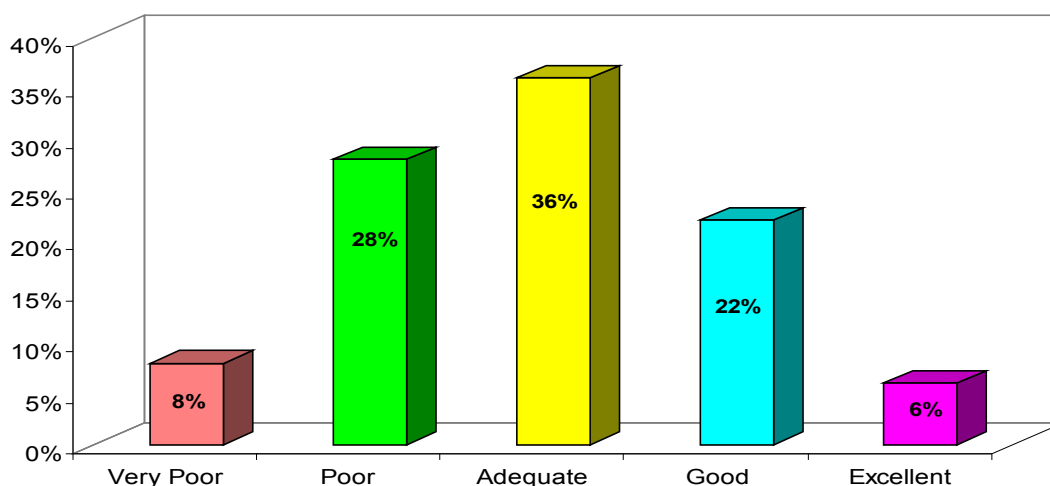
Table 3.5: Rating of Other Aspects of Archaeological Education

Strong and Weak Points	Actual Respondents		% response	
	Actual	%	Strong	Weak
Artefact experience / knowledge	6	3	50	50
Report writing / eval. of arch. findings	5	3	40	60
Legislative framework for archaeology	4	2	25	75
Emphasis on arch. as a profession	1	1	-	100
Scientific aspects of the work	1	1	-	100
Access to technical facilities	1	1	100	-

3.3.3 Education as a Preparation for Careers in Archaeology

Survey respondents who work in a non-academic field were asked to rate their archaeological education in terms of its use as preparation for their current working career. Some 148 respondents - 76% of the total - answered this question and their ratings are summarised in Figure 3.3.

Figure 3.3: Rating of Archaeological Education as a Preparation for a Non-Academic Career



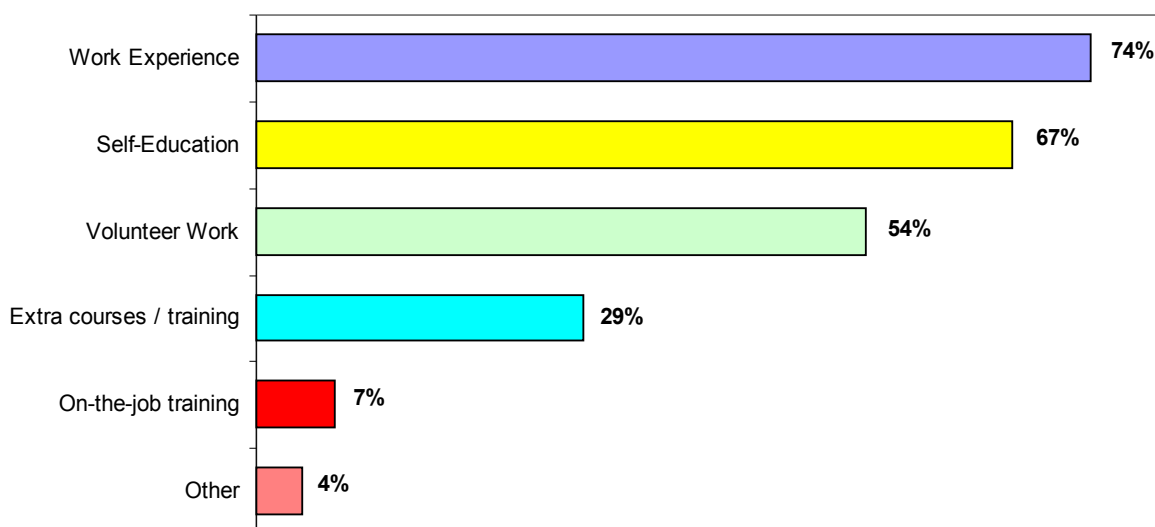
As the chart shows, the ratings are not very high. While on the one hand, just over one-quarter (28%) consider that their education provided a good or even excellent preparation for their present career, on the other hand, over one-third (36%) feel that it was poor or very poor preparation for their career. The balance of 36% put it at adequate. If the ratings are marked on a scale of 1 to 5, with 1 being 'very poor' and 5 being 'excellent', the average score is 2.9 - i.e. just below adequate.

It is important to note that this rating is not an evaluation of the inherent quality of archaeological education in Ireland. (The generally high ratings given to the latter were summarised in Figure 3.1). The pattern of responses illustrated in Figure 3.3 is a reflection of the strongly academic orientation of most archaeological courses, especially at university undergraduate level. These courses do not - and cannot - cover all of the practical fieldwork skills that are increasingly demanded of archaeologists working in the contracting and consulting sector. This issue has already been highlighted in Figure 3.2 and is further discussed in Section 3.4 below.

3.3.4 How Gaps in Education have been Addressed

Survey respondents were asked to identify how they have attempted to make up for any weaknesses or deficiencies in their archaeological education. Their responses to this question are summarised in Figure 3.4.

**Figure 3.4: Respondents' Approach to Addressing Gaps
in their Archaeological Education**



The majority of respondents have sought to develop their skills through informal means - i.e. experience gained at work, self-education (reading etc.) and working as a volunteer, usually as undergraduates and/or postgraduates. Only 29% stated that they had attended additional courses and just 7% have received formal, on-the-job training.

3.4 CONCLUSIONS

The following are the principal conclusions that emerge from the preceding review of the current provision and experience of education in archaeology:

- **Archaeology is a graduate profession:** archaeology is almost exclusively a graduate profession which, to date, has depended on the universities to provide the foundation of knowledge required. Indeed, the majority of survey respondents have taken a post-graduate qualification to assist their entry into the profession.
- **The Universities provide a broad academic education in archaeology:** archaeology degree courses are popular, as the numbers entering demonstrate. The majority of archaeology students do not intend to pursue a career in archaeology and are not seeking vocational training in archaeology. While the practical fieldwork content of many undergraduate programmes has been increased, the staffing and cost implications mean that it is very difficult for the universities to do other than give limited exposure to this aspect.
- **University education is rated highly by survey respondents:** the fact that the undergraduate degrees are not vocational qualifications is not a criticism of the universities. Indeed, survey respondents expressed a generally high level of

satisfaction with their university education. Moreover, it is essential that practical professional work is firmly grounded in a real understanding of the subject.

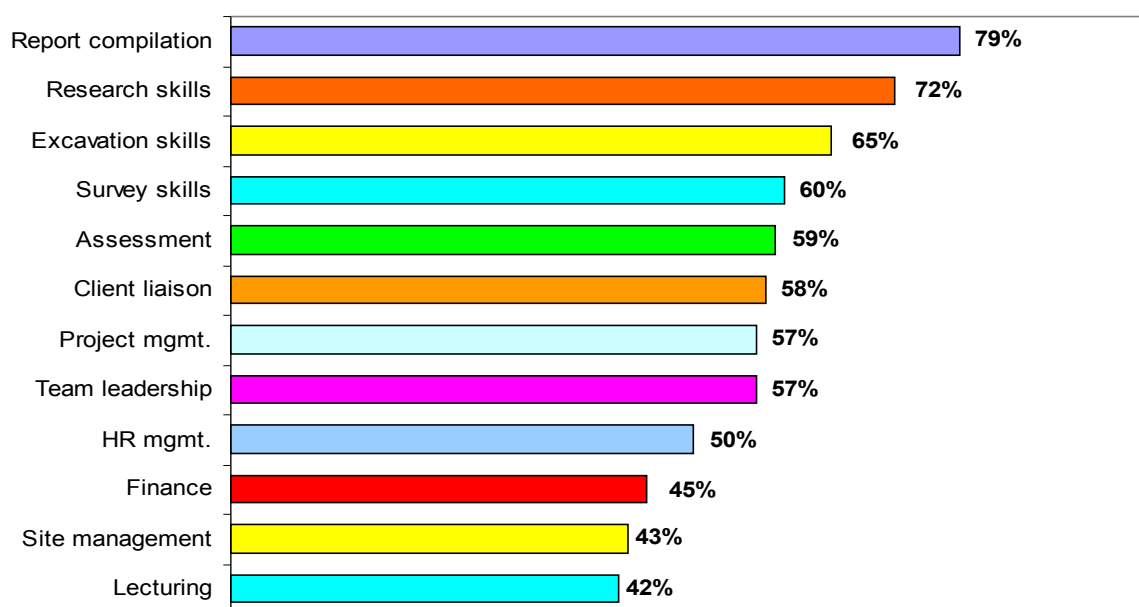
- **Archaeology graduates must seek further education and training to make the transition to professional practice:** while the primary degree provides the necessary foundation of knowledge, it is up to graduates to seek further education and training as an entry route into the profession. This is also the case with several other professions where postgraduate degrees and diplomas, and training provided by professional institutes, are the normal route for new entrants. However, the survey findings suggest that postgraduate qualifications in archaeology do not fill all the requirements of professional practice.
- **There is inadequate provision of professional training for established and aspiring archaeologists:** the survey findings show that the majority of respondents have depended on informal methods to fill the gaps in their training. In general, these have involved putting time into self-education and voluntary work, and learning from on-the-job training. A minority - less than one-third of respondents - have taken extra courses and formal training to develop their professional skills. This is indicative of a weak supply of such training.

4. TRAINING NEEDS AND PROVISION

4.1 COMPETENCIES REQUIRED

Respondents to the survey of archaeologists were asked to identify the skill requirements of their present position. Their responses are summarised in Figure 4.1. The chart highlights an emphasis on practical, professional skills, both in archaeological fieldwork and in project and business management.

Figure 4.1: Main Competencies Required by Archaeologists in their Present Posts



In addition to the 'top twelve' competencies listed in Figure 4.1, the survey respondents listed a wide range of other skills, chief among these were the following:

Competency	% of Respondents
Marketing / business development	24%
Laboratory work	11%
Curatorship	11%
Conservation	7%
IT skills (incl. GIS)	7%
Illustration / editing	3%
Public relations	3%
Diving training & safety	2%
Archiving	2%
Administration	2%
Boat handling	2%
Publishing	2%
Strategic management	2%
Project development	2%

The above list serves to reinforce the picture drawn in Figure 4.1 of a strong emphasis on practical, professional archaeological skills. This pattern is consistent with the rapid growth of the contracting / consultancy sector and the large proportion of survey respondents who work in this sector.

4.2 TRAINING NEEDS

Survey respondents were asked to identify the subjects and skills in which they believed in-service training would benefit them in their profession. They were also asked to state whether each need they identified was an *urgent* need or a *future* need. Their responses are summarised in Table 4.1.

Table 4.1: Principal Training Needs of Survey Respondents

	Urgent %	Future %	Total %
Technical knowledge updating	50	36	86
Fieldwork methods	39	42	81
Report writing	28	23	51
Project management	27	35	62
General management	27	38	65
Excavation licensing	26	22	48
Budgeting & finance	25	33	58
Research skills	24	28	52
Communication skills	22	28	50
HR management	20	30	50

The survey findings summarised in Table 4.1 reveal extensive training needs. There is a close correlation between these and the professional competencies listed in Figure 4.1. The findings on training needs are also consistent with the educational profile of archaeologists analysed in Chapter 3.

In addition to the priorities set out in Table 4.1, survey respondents identified a further list of subjects in which they have training needs. However, none of these subjects were identified by more than 3% of respondents. They include the following:

- Health and safety
- Legislation
- Surveying
- Artefact studies
- Post-excavation research
- Computer skills
- Scientific methods
- Marketing
- Laboratory skills
- Geology.

Overall, the list of training needs identified includes a combination of subjects and skills that are specific to archaeology (e.g. technical knowledge updating, fieldwork methods, excavation licensing etc.) and those that are non-sector specific (e.g. general management, budgeting and finance, communication skills, HR management etc.). There are already a wide range of public and private organisations providing training in the latter category. The question is how best to design and deliver training to meet the sector specific category of needs.

Steps taken to date by archaeologists to resolve their training needs are outlined in Section 4.3.

4.3 CURRENT LEVEL OF IN-SERVICE TRAINING

4.3.1 Participation Rates

Survey respondents listed the courses that they have attended during the past 3 years. As indicated in Figure 3.4 (Section 3.2.4.), only 54 respondents have attended courses on an in-service basis and, of these, 51 described the courses. Numerous different courses were mentioned, the majority of which are not specific to archaeology. They are grouped into broad categories in Table 4.2.

Table 4.2: In-service Courses Attended by Survey Respondents during the Past 3 Years

Category	No. of Respondents
Computer related	25
Technical skills for archaeology	18
Safety and first aid	13
Communication, presentation, marketing skills	9
Project management / supervisory skills	8
Business management	5
Planning / environmental law	4
Museum management	4
Other	6

- Notes:
- total adds to more than 51 due to attendance by many respondents at more than one course
 - technical skills courses included courses in underwater and nautical archaeology, excavation, artefact analysis and paleo-pathological archaeology
 - 'other' courses included languages, fine arts and photography.

4.3.2 Quality of Courses

The courses taken by respondents on an in-service basis were delivered by a wide range of providers. The course ratings given by respondents with regard to content and quality were positive. Respondents were also asked to rate the quality of in-service training courses with respect to a series of ten factors on a scale of 1 to 5 (with 1 = very good, 2 = good, 3 = adequate, 4 = poor and 5 = very poor).

The response rate to this question was modest, averaging 29% of all survey respondents. This is not surprising since there is very little in-service provision at present (as many respondents pointed out).

Table 4.3: Rating of Quality of In-service Courses

Quality Factors	Average Rating*	No. of Respondents
Quality of Trainers	2.43	47
Usefulness of Courses	2.72	61
Duration of Courses	2.78	56
Suitability of Modes of Delivery	2.88	48
Timing of Courses	2.92	49
Location of Courses	3.03	62
Communication of Information on Courses	3.06	63
Availability of Training Materials	3.17	54
Monitoring & Evaluation of Courses	3.20	45
Availability of Courses	3.72	83

* - respondents rated each factor on a scale of 1-5, with 1=very good, 2 = good, 3 = adequate, 4 = poor, 5 = very poor. The lower the average score, the more favourable the rating.

Table 4.3 shows the average rating for each factor and the number of survey respondents who gave a rating in each case. In brief, a rating of less than 2 would indicate a high level of satisfaction; a rating of between 2 and 3 indicates an average to good level of satisfaction and a rating higher than 3 indicates a less than satisfied view.

Overall, the ratings were not high. More favourable ratings were given to the quality of trainers and certain aspects of course organisation (mode of delivery, duration and time). The latter suggests that the courses were well structured to suit people at work. On the other hand, low ratings were given to factors relating to access to courses - including location, information on courses, and training materials. A particularly low rating was given to the availability of courses, emphasising a high level of dissatisfaction on this issue.

4.3.3 Employers' Support for CPD / In-service Training

In order to gain some understanding of the level of support for in-service training among employers, respondents were asked whether their organisation / employer:

- provides training courses
- encourages staff to pursue training / professional development (CPD)
- provides financial support for training / professional development.

The responses are summarised in Table 4.4. These indicate that about half of the respondents are provided with training courses by their employers, two-thirds are encouraged by their employers to pursue CPD, and almost 60% receive financial support to engage in CPD.

Table 4.4: Employers' Support for Training

Question	% of respondents		% Responding to Question
	Yes	No	
Does your employer / organisation			
- provide training?	52	48	84
- encourage you to pursue CPD?	65	35	85
- provide financial support for CPD?	58	42	82

There are distinct differences between sectors in the level of support that employers give to in-service training/CPD. These differences are highlighted in Table 4.5 which shows that there is a high level of support provided in the public service and in academic institutions. About half of the respondents in the museum and local authority / NRA sectors receive support from their employers.

The weakest levels of support are found in the contracting and consulting sector. In the first place, about 30% did not answer this question, with many marking it '*not applicable*'. It is also clear that very few employers in this sector directly provide training courses to their staff. About half of the respondents who work in this sector and who answered this question are encouraged to take courses by their employer. However, only one-third receive financial support to do so.

Table 4.5: Employers' Support for Training, by Sector

Sector	Response Rate*	Employer Provides Training	Employer Encourages Staff to take courses	Employer Provides Financial Support
Academic	100%	Y = 78%	Y = 88%	Y = 66%
Public Service	100%	Y = 94%	Y = 88%	Y = 94%
Local Authorities / NRA	89%	Y = 69%	Y = 56%	Y = 50%
Museums	100%	Y = 50%	Y = 70%	Y = 60%
Contracting / Consulting	71%	Y = 17%	Y = 47%	Y = 33%

* % of respondents in each sector who answered this question.

4.4 CONCLUSIONS

- **A wide range of competencies are now required of archaeologists in professional practice:** this is especially true of the contracting and consulting sector where the rapid expansion in the number and scale of projects is giving rise to new demands of archaeologists.
- **There are extensive training needs in fields not covered by existing education in archaeology:** as noted in Chapter 3, the university degrees in archaeology are not vocational qualifications, and prospective archaeologists need further training to become competent professionals. The training needs are greatest in the contracting and consulting sector where there is a mix of sector specific and non-sector specific training needs.

- **Only a minority of archaeologists have attended training courses during the past 3 years:** despite the high level of need, there is a low level of participation in training courses. Moreover, survey respondents did not give high ratings to the courses that they have attended. There is a very poor supply of courses suited to the needs of archaeologists and most of the courses attended by survey respondents were non-sector specific.
- **Employers of archaeologists provide more encouragement than practical support for in-service training/CPD:** the highest levels of support for training and CPD are found in the public sector and academic institutions. The weakest support is in the contracting and consulting sector which is also where the greatest needs lie.
- **There is no formal training or CPD requirement in the sector:** the absence of this weakens the argument for investment by employers in training.

5. THE INTERNATIONAL PICTURE

It is relevant to consider how the international archaeology community is approaching the issues of training and professional development. Initially, four countries were chosen as a representative sample, viz. the USA, England, Australia and Germany. Each of these has a well-developed cultural resource management and archaeological infrastructure, and so might have been expected to take the lead in these areas. In the event, in neither Australia nor Germany does the archaeological profession seem to have advanced to the stage where professional training and development have been given any serious consideration. The review in this Chapter therefore focuses on the United States and England.

5.1 UNITED STATES

The key body in the USA that has dealt with the issues of professional training and development of the archaeological community is the Society of American Archaeologists (SAA). In 1994, a survey of its 5,000 strong membership highlighted education as being perhaps the major area of concern to the profession². The report noted a widening schism between archaeology as a business and archaeology as an academic pursuit, and concluded that a significant number of people in the two growing sectors (private and government) believe that the academic training they received failed to provide them with the requisite skills.

The SAA picked up on this issue. Its response was to press for reforms of the archaeological curricula in universities, believing that this held the key to providing archaeologists with an appropriate and relevant skills-base. Consequently, in 1997, it held a workshop on the reform of university teaching of archaeology and set up working parties to look at undergraduate teaching, postgraduate teaching and professional development.

In a preliminary notice, the working party on professional development stated that “*professionals in diverse work settings require access to continuing education opportunities in a variety of formats: courses, workshops, symposia, online seminars, resource guides, case studies, booklets, and other publications*”. The party also recommended the following preliminary steps to facilitate this:

- Compilation of information resources on workshops, classes etc.
- Development and evaluation of educational resources such as publications and web-sites
- Identification of mechanisms to deliver professional development opportunities through collaboration with existing professional societies.

The SAA seems to have made little progress towards its stated goal of teaching reform in universities: between 1999 and the present, this issue seems to have been dropped from

² M A Zeder 1997: “*The American Archaeologist: A Profile*”. Altamira Press, Walnut Creek

the agenda. The current position of the SAA is that it will help the professional development of archaeologists by holding its own workshops.

The archaeological community in the United States is only now establishing a professional body - the Register of Professional Archaeologists (ROPA) - for setting professional standards and certification of archaeological competence. ROPA is supported by the SAA, the Archaeological Institute of America (AIA), the Society for Historical Archaeology, and other stakeholders in the cultural resource management field. However, it has yet to achieve the professional recognition from both archaeologists and employers that is enjoyed by the Institute of Field Archaeologists (IFA) in the UK.

Within the academic system, the University of Arizona is recognised as being a leading provider of undergraduate and postgraduate courses in archaeology. Even at this university, however, no provision is made for offering further training or development to existing archaeology professionals.

Our conclusion, therefore, is that professional training and continuing development for archaeologists are acknowledged as issues in the US, but, to date, few specific initiatives have been undertaken to alleviate the perceived lack of relevant training for professionals.

5.2 ENGLAND

5.2.1 Introduction

In the UK, or more specifically England, professional archaeology appears to have become firmly established. This is due primarily to the existence of formal professional bodies that are concerned with issues of training and development. The principal organisations are:

- English Heritage
- Institute of Field Archaeologists (IFA)
- Archaeology Training Forum
- Cultural Heritage National Training Organisation (CHNTO)
- Council for British Archaeology (CBA)

English Heritage is the statutory body for archaeology in England. The Institute of Field Archaeologists is *the* body that represents the interests of archaeology professionals. Membership has become a *de facto* necessity and its accreditation system is recognised by all employers. The Archaeology Training Forum is a delegate body composed of representatives of all organisations that have an interest in training and career development in archaeology. CHNTO sees itself as “*the strategic voice of employers and focal point for information on education and training for the Cultural Heritage sector*”. The CBA, membership of which is open to all, serves as a forum for promoting public interest in, and knowledge of, Britain’s past.

5.2.2 Key Initiatives

There are four recent initiatives that examine the archaeological profession and its education and training in England:

- (i) A survey of the archaeological profession undertaken in 1998 (published as *Profiling the Profession, A Survey of Archaeological Jobs in the UK*, by Kenneth Aitcheson).
- (ii) A preliminary review of training in professional archaeology in 1998 (published as *Training In Professional Archaeology: a preliminary review*, by Gill Chitty).
- (iii) A benchmark statement for higher education programmes in archaeology, published by the Quality Assurance Agency for Higher Education, 2000.
- (iv) A project to define professional functions and standards in archaeology, being conducted by Q-West Consultants on behalf of English Heritage and the Qualifications and Curriculum Authority/Scottish Qualifications Authority (ongoing).

(i) *Survey of the Archaeological Profession (1998)*

This survey was undertaken by Kenneth Aitcheson on behalf of the Council for British Archaeology, English Heritage and the Institute of Field Archaeologists. The focus of the survey was to identify the size of the archaeological profession, range of jobs, salaries, and employment patterns. Training and professional development were not examined and are not mentioned.

(ii) *Training in Professional Archaeology: a Preliminary Review (1998)*

This study was commissioned by English Heritage on behalf of the Archaeology Training Forum.

The report begins with a review of previous studies of archaeological training and development. The consensus view of all of these studies is that training provision in archaeology is weak and poorly aligned with modern professional roles.

The report then assesses current training provision in archaeology and concludes that an undergraduate degree in archaeology, in the context of Higher Education, is not seen as a vocational qualification and that it provides education for students who want a general degree with transferable skills.

The report states that concerns about the quality of entry-level training and investment must be viewed in the context of supply outstripping demand in the labour market, and a reduction in resources in universities for providing practical training. Detailed analyses of training provision and qualifications follow. Among the conclusions of these analyses are that:

- Vocational training and professional development are delivered principally through higher education establishments
- Overall, vocational training in archaeology is unregulated (either for content or quality).

The report continues with the results of a telephone interview survey of archaeologists, one section of which identifies future training needs. Key areas where respondents felt more training was desirable were:

- Information technology
- Technical skills - a diverse range with some IT overlap but including areas such as surveying, soil science and forensic archaeology
- Management skills, project management, accounting practices, best value, quality assurance etc.

The report then looks at training and career development issues. The lack of a structured route from education into professional practice is seen as a crucial shortcoming and a general dissatisfaction with the quality of work experience offered to those entering the profession is noted. The almost complete absence of continuing professional development is also highlighted.

The final part of the report contains a number of proposals and recommendations including the following:

- Commissioning a project to define professional roles and functions (see (iv) below)
- Development of a core curriculum for archaeology training
- Design of a professional qualification for practice in archaeology
- Provision of on-line information on training courses, careers in archaeology etc.
- Encouraging organisations to commit to CPD as good business practice
- Direct training into those areas where skills shortages and needs have been clearly defined.

Many of these initiatives are seen as inter-organisational ones which should involve the key bodies listed in Section 5.2.1 above.

(iii) *Benchmark Statement for Archaeology*

The archaeology benchmark statement was drawn up by the Quality Assurance Agency for Higher Education and is intended to make explicit the general academic characteristics and standards of an honours bachelor's degree in archaeology.

The document notes that archaeology at higher education level “*firmly aligns itself with a liberal view of education and learning, whilst recognising the practical application of the subject’s knowledge base and skills*”. It states that individual degree programmes will locate themselves at different points within “*a triangle drawn between the complementary archaeologists of the humanities, sciences and professional practice*”. However, it does not propose a significant change in the approaches adopted by universities.

The benchmark statement covers the scope of knowledge and understanding of archaeology and the skills that students should acquire, the methods of teaching and learning, and the modes of assessment. It also sets out the minimum standard of achievement and the standard that an average student should demonstrate in order to earn an honours degree. Overall, the document is quite general in its prescriptions, leaving educational institutions with plenty of room for manoeuvre.

(iv) *Project to define professional functions and standards in archaeology*

The recommendation of the report by Gill Chitty (see (ii) above) to define professional roles and standards has been taken up by the IFA and CHNTO. A project currently running has as its aims the definition of key occupations and functions in the archaeology profession, and the development of national occupational standards to meet the needs of the sector. This project is now at draft final report stage. We understand that it has avoided specifying job profiles but has focussed on key functional areas and the skill needs of these areas. The main objective is to enable archaeologists and their employers to identify the professional standards (skills, knowledge and experience) appropriate for different roles and levels of responsibility. The next step, which the IFA will consider, is to determine how best to deliver the training required to support these standards.

5.2.3 Conclusion

Examination of the current state of training and professional development in archaeology shows that these are issues which are only now being addressed. The principle reason for this is that archaeology itself is a relatively young profession. Until 30-40 years ago, it was the preserve of academics and people of independent means. In the UK, the advent of rescue archaeology in the 1960s stimulated an increase in demand for archaeologists which, in turn, led to the formation of professional bodies such as the IFA. It is these bodies which have been driving forward the issues of training and development. Similar processes are at work in other “developed countries”, but have yet to reach quite the same stage.

The methods of delivery of training and how courses and professional development will be financed in England have yet to be addressed. It seems unlikely that professional archaeologists operating in the commercial sector will be able to meet the costs on their own account, given the low salary levels and temporary nature of employment contracts. It seems equally unlikely that commercial organisations, already working on narrow margins, will be willing to invest resources in staff development.

In this respect, professional archaeologists working in higher education establishments or for the major national bodies already fare better. UK universities offer a range of courses for all staff, including ones that teach generic skills (information technology, for example), as well as courses that are tailored to the needs of particular employees. English Heritage, as the main national body, also has a CPD programme for its staff.

In conclusion, it can be said that the general situation in England regarding training and professional development is very similar to that obtaining in Ireland. The professional bodies are a short distance ahead, having conducted an analysis of professional functions and standards in archaeology, but they have yet to move to the design and implementation of training responses and the introduction of CPD. They will have an advantage of much larger scale in addressing these issues. However, it will be useful for the profession in Ireland to take into consideration the findings and recommendations of the report on *'Defining Professional Functions and Standards in Archaeology'*.

6. FUTURE DEVELOPMENT OF EDUCATION AND TRAINING IN ARCHAEOLOGY

6.1 FRAMEWORK

A broad framework for the development of education and training in archaeology is depicted in Figure 6.1. The main components are as follows.

6.1.1 Goal and Mission

The ultimate goal of an education and training strategy should be to ensure the delivery of excellent archaeological services to all stakeholders. In this context, stakeholders include the direct clients of archaeologists, other recipients of archaeological services (e.g. visitors to museums, archaeology students, researchers etc.), the public, the State and its agencies, and the profession itself. Excellence in archaeological services means that they should be comparable to or better than those delivered in other countries with well developed archaeological infrastructures (e.g. England and the USA).

Successful delivery of this goal requires the development of excellent professional standards in archaeology. The mission of an education and training strategy should therefore be the maintenance and continuous enhancement of high archaeological standards throughout the island of Ireland. This is already a core objective of the Institute of Archaeologists of Ireland.

6.1.2 Components of the Strategy

There are three key areas of activity:

- pre-service education
- in-service training
- continuing professional development.

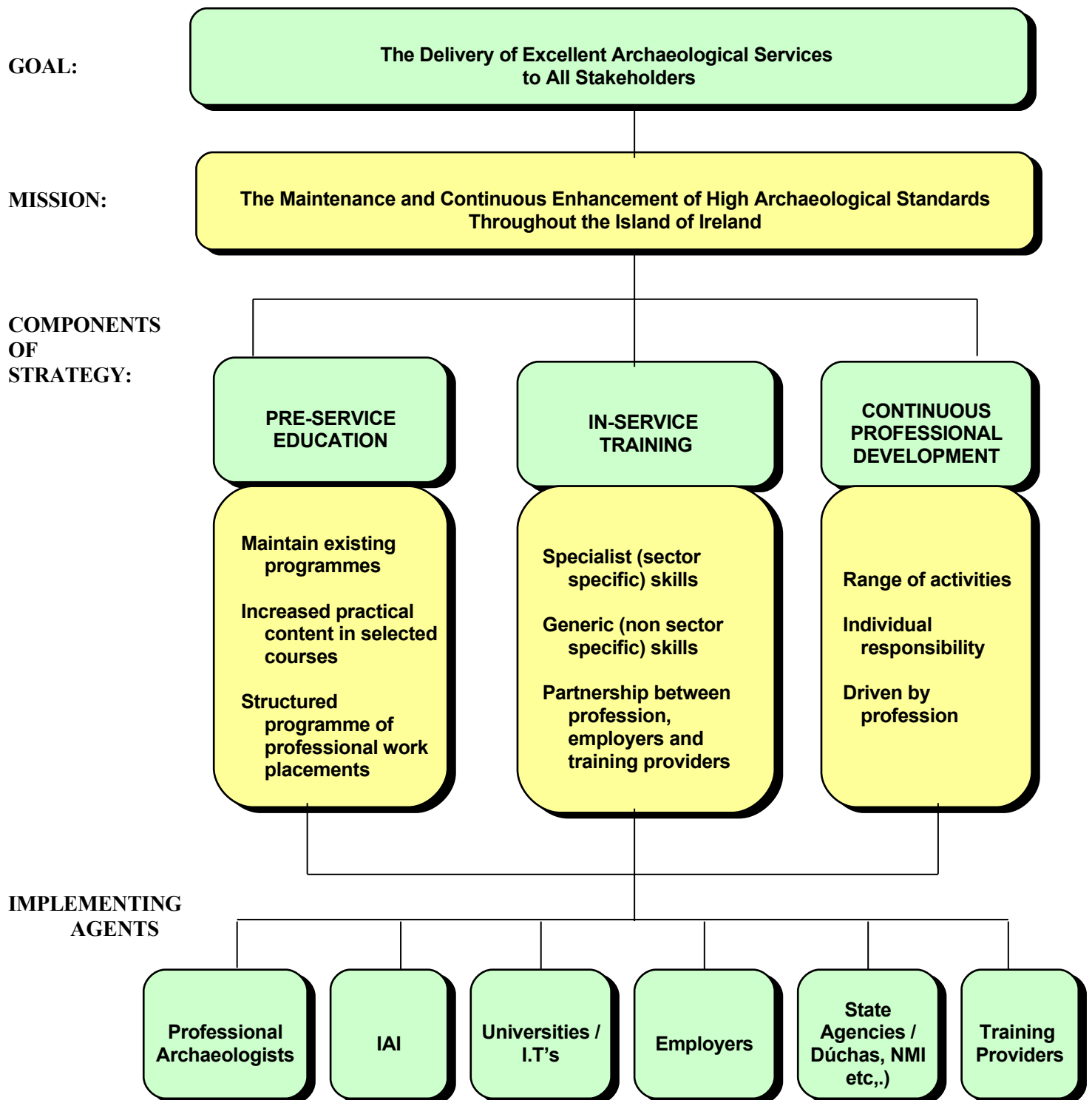
- **Pre-service Education**

The nature of pre-service education in archaeology in Ireland has been discussed in Chapter 3. Taking all of the points made into consideration, the proposed approach is to maintain the existing degree programmes, for which there is a healthy demand, and to increase the practical content of selected courses, including those at postgraduate level. The need and demand for a pre-service qualification in archaeology with a strong vocational orientation should be tested by a new course such as the B.Sc. that the Institute of Technology Sligo had planned to introduce in 2002.

A key initiative that would help to increase the practical input into pre-service education would be a **structured programme of work placements**. This programme would require close cooperation between employers of archaeologists

and the educational institutions to ensure that the placements included exposure to specific aspects of professional practice.

Figure 6.1: Framework for the Development of Education and Training in Archaeology



- **In-service Training**

There are urgent training needs in the profession which need a rapid response. As detailed in Chapter 4, these needs can be divided into two categories:

- **specialist (sector specific) needs**, such as technical knowledge updating and fieldwork methods, which can only be met by qualified specialist providers, notably the university Departments of Archaeology.
- **generic (non-sector specific) needs**, such as financial management and communication skills, which can be met by more general training providers from both the commercial and higher education sectors.

An approach to the delivery of in-service training is outlined in Section 6.3.

- **Continuing Professional Development (CPD)**

CPD refers to the entire process of maintaining and developing professional skills on the part of the individual professional. It typically comprises a range of activities, such as participation in training courses, attendance at conferences, writing and publication of papers, research and reading etc. CPD initiatives have now been introduced in many professions. Although it has yet to be introduced in archaeology, the IAI has provided for its introduction in its Articles of Association, in particular Article 105 which states that:

105: The Board may from time to time and, insofar as may be practicable, in consultation with the members, take such measures as it sees fit to promote the continuing professional development of the members.

An approach to the introduction of CPD in archaeology is outlined in Section 6.4.

6.2 ISSUES TO CONSIDER

The future development of education and training in archaeology will be affected by a number of issues. These will need to be considered carefully in the design of any initiative. The principal issues are outlined below.

6.2.1 Scale and Structure of the Profession

- **Scale**

There were 650 archaeologists at work in Ireland in March 2002, of whom 116 came from overseas. Of the remaining 534, approximately 360 are members of the IAI. This is a very small number compared to many other professions - for example, there are 12,500 chartered accountants and over 18,000 members of the Institution of Engineers of Ireland.

The small scale of the sector affects training provision in a number of ways:

- low demand levels threaten the viability of training programmes
- it is difficult to sustain a schedule of courses which is repeated at regular intervals
- the financial resources available to IAI will be limited with corresponding limitations on the level of professional support activities and input to CPD that can be delivered.

- **Structure**

The small size of many of the firms in the contracting and consulting sector and, indeed, of many museums, means that their ability to fund training and to allocate staff time to training is very limited. Secondly, the structure of employment in archaeology, whereby a high proportion of people working in the contracting and consultancy sector are on short term contracts and/or working on a part time basis, militates against the provision of, and participation in, training. Employers are unlikely to invest in training short term staff, and individuals are not motivated to participate since there appears to be no clear benefit in terms of career progression.

- **Geographic Spread**

The population of archaeologists is widely dispersed throughout the country, as illustrated by Figure 2.4. Although about half are located in Leinster, there are substantial proportions throughout the rest of the country. This raises the question of access to courses: it is impossible to run courses in every part of the country, irrespective of demand, but distance is a real barrier. Course structures and organisation must take this into account to ensure that this barrier can be overcome.

6.2.2 Certification

Certification is important not only because it offers the possibility of defining standards of professional attainment in archaeology, but also because qualifications offer the potential for career progression. A major difficulty with the archaeology sector in this respect is the small size of its working population. This weakens the prospects of sustaining long-duration programmes for practising archaeologists.

The emphasis in Britain is increasingly on more practical in-service training and education, with certification at vocational and higher education levels. Indeed the CHNTO's strategy is heavily oriented to the promotion of occupational standards of competence as well as incorporating them into membership criteria for professional bodies in the sector.

In view of the small size of the archaeology profession in Ireland, the approach to certification of sectoral training must be tempered by a realistic view of potential demand. It is also essential to avoid creating programmes that are beyond people's interest or willingness to pursue.

It may be appropriate to consider the development of a professional qualification based on a programme that is structured in discrete modules. The modules would be designed specifically to address the needs expressed by survey respondents (see Chapter 4), with single certificates being available for each module. These certificates could then be accumulated towards a qualification under the Accumulated Credits and Certification of Subjects (ACCS) approach. Again, the question of resources arises - this is discussed further in Section 6.3.

Finally it is recommended that all course providers should always certify participants for successful completion of courses.

6.2.3 Motivation

Irrespective of how well the training structures and delivery mechanisms might be planned, they will be of little value if archaeologists are not motivated to participate. There may be reluctance on the part of many to engage in professional development activities - some may be sceptical of the need to do so at all. The lack of adequate career paths and limited opportunities for promotion, or even transition to a new area, mean that careers can plateau at an early stage. Typically, staff in plateaued career positions do not recognise their needs for further training. This may also apply to many older and senior staff.

Gaining and sustaining widespread interest in, and support for, training and CPD in the profession will depend on the inherent attributes of any training offered, and the delivery strategy implemented. The main considerations are as follows:

- **Relevance:** perhaps the most important motivator in any training programme is that it is relevant to the needs of its prospective participants. This depends on the effectiveness of the needs identification process and on the design and development of the programme content in response to these needs.
- **Participation in Needs Identification:** the continued direct participation of archaeologists in the process of needs identification (as initiated by this study) will be an essential element in gaining the involvement of all parties in the training strategy and in ensuring that the training responses are relevant to them.
- **Quality:** this is an obvious motivational requirement of any training programme. Poor quality training will quickly lose credibility and support, and will do more damage than good. A validation process would be an important measure in this respect.
- **Ease of Participation:** any barriers to participation will increase resistance. These barriers can arise from a number of causes including high cost, onerous time commitment, travel distance, awkward scheduling and course complexity. As a general principle, employees should not have to pay for their own in-service training. Moreover, in view of the very limited resources of many small consultancy

practices, the cost of training programmes should be pitched at as low a level as possible.

- **Recognition:** the issue of certification has been discussed in Section 6.2.2. It is important that participants receive recognition for successful completion of training courses. Certification is a motivator in itself but is far stronger if linked to salary increase and career progression. While recognising the restrictions that apply in the sector due to its small size and modest pay levels, it would be beneficial if employers gave more explicit recognition to qualifications achieved in-service as well as pre-service when making appointments.

6.3 IN-SERVICE TRAINING

The survey findings revealed an urgent need for training in a number of areas of immediate relevance to professional practice. These needs were confirmed during the course of consultations with employers and institutions. In devising a training response, it is important to take a realistic view of what can be done, taking into account the considerations raised in Section 6.2.

As previously noted, the in-service training needs can be divided into two broad categories: generic (non-sector specific) and specialist (sector specific).

6.3.1 Generic Training Needs

The key generic areas identified by survey respondents include:

- general management
- budgeting and finance
- communication skills
- human resource management.

There are many established providers of training in these subjects, including academic institutions and private training companies. A valuable service to members of the profession would be some signposting or guide to providers of courses in different subjects. The IAI could compile a database of training providers and courses. Entry onto the database should be subject to a basic screening or validation process covering the professional and corporate status of training providers, professional affiliations and accreditations, qualifications and track record.

6.3.2 Specialist Training Needs

The key specialist needs identified by survey respondents include:

- technical knowledge updating
- fieldwork methods
- report writing *
- project management *
- excavation licensing
- research skills.

* *While these may be generic skills, in part, it is assumed that there are specialist requirements in relation to archaeology.*

The content of some of these subject areas, notably technical knowledge updating, needs elaboration, and this will require further enquiry among IAI members. However, the above list gives a clear indication of the areas of need. The following is a recommended approach to meeting these needs:

- **The IAI should form a partnership with key organisations with an interest in the issues of training and career development in archaeology:** this partnership would be embodied in an archaeology training advisory committee or forum along the lines of the Archaeology Training Forum in Britain. This body was set up in 1998 to review the present provision of training in archaeology and to coordinate future strategies to meet the profession's training needs. In Ireland, the key partners would include IAI, the university departments of archaeology, the Heritage Council, the National Museum of Ireland and Dúchas. The committee should identify solutions to training needs, keep current provision under review, seek to obtain financial support for training, and advise on the design and delivery of training in conjunction with academic and professional partners. The committee should also periodically review the training needs of the profession.
- **A training programme that incorporates responses to the most urgent needs should be designed in conjunction with an academic partner under the aegis of this committee:** in view of the small size of the sector, there is really only room for one university department of archaeology to take the lead on this, although consideration might be given to involving others, depending on the specific skills required. Based on the geographical distribution of archaeologists, UCD is a candidate institution to take the lead, while others might deliver components of the overall programme in accordance with their fields of specialisation.
- **An integrated, certified programme covering the key areas of need (both specialist and generic) could be designed for delivery on a modular basis:** the first priority is to ensure that courses are made available to meet the identified needs. However, as outlined in Section 6.2.2, it would be possible to take this a step further by integrating the training courses into a programme structured in discrete modules. Each module would address a specific need, and would be certificated. The certificates could then be accumulated into an overall professional qualification under the Accumulated Credits and Certification of Subjects approach. The modules should be designed to fit into the schedules of people in employment e.g. in sets of three or four 2-day sessions.
- **The courses should be delivered through the adult and continuing education system:** this will allow greater flexibility in design and delivery. This is an important consideration since it is unlikely that the programme could be run viably on a continuous basis. The small size of the market means that the demand for training in particular subjects may be satisfied after just a small number of iterations, and there may be a long pause before demand rebuilds to a level at which running courses in those subjects becomes viable again. It will therefore be necessary to continuously monitor demand levels.

- **IAI should appoint a director of education and training to coordinate and drive the initiative:** the role of the director of education and training would broadly be to:
 - initiate the establishment of the archaeology training advisory forum, and to assist it with its work
 - build on the research in this report by further refining the training needs analysis, and devising a mechanism for periodically monitoring these needs
 - work with academic and professional partners in designing appropriate responses to specialist archaeological training needs
 - identify appropriate providers of generic training
 - design a suitable CPD system for the profession (see 6.4 below)
 - promote participation in training programmes and CPD in the profession.

The director of education and training should report to the Board of the IAI. The position requires, inter alia, knowledge of the stakeholders, knowledge of the education system and excellent communication skills. In order to attract the right level of experience and skill within the available budget, it might be filled on a part-time consultancy basis.

6.3.3 Funding

In the first instance, the profession should take responsibility for funding its own training. However, it is recognised that many individual practitioners are on modest incomes and would find the cost of training to be a barrier to participation. Similarly, employers may be reluctant to fund high training costs if their margins are very low.

In the light of this, it is recommended that external financial support be found both for the proposed director of education and training and for the design and development of training to meet specialist needs, including the production of training materials. The actual delivery costs could then be kept to a minimum. A budget of c. €50,000 p.a. will be required for the director of education and training (excluding office overheads). A further sum of c. €25,000 should be provided for support services and the design and development of training programmes.

With the benefit of this external input, employers should pay for the costs of participation by their staff in the training initiatives developed under this strategy, as is the norm in most professions. The possibility for levying reduced costs on individual, self-employed archaeologists, who are on low incomes, should be investigated.

6.4 CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

CPD is now an established feature of many, if not most, professions. It is typically introduced and administered by professional institutes with a view to promoting the maintenance and further development of professional competencies among their members. As we have noted, the IAI has already provided in its Articles of Association for the introduction of CPD. In accordance with its new status as a professional institute, the IAI should now consider the introduction of a formal CPD requirement for its members. In doing so, it should bear the following in mind:

- Archaeologists are not obliged to be members of the IAI in order to practise. CPD requirements should therefore not be so onerous that they deter archaeologists from joining, or remaining in, the Institute. Moreover, sanctions for non-compliance are ineffective if membership of the Institute is not valued.
- CPD systems must be administered, and complex CPD systems require substantial resourcing; the IAI, as a small institute, has limited resources and its CPD system should therefore be kept as simple as possible.

Taking these points into account, it is recommended that the IAI introduce a relatively simple form of CPD. As an example of such, the system devised by the Institute of Management Consultants in the UK (IMC), and to be adopted by the Institute of Management Consultants in Ireland (IMCI), is detailed in the Appendices. A similar system might be considered by the IAI. The main features are:

- Members must complete an Annual Affirmation form at the time of membership renewal. The form covers:
 - confirmation of continued adherence to the Institute's Code of Practice
 - statement as to whether or not the member is currently in practice as a management consultant
 - identification of the member's professional specialisms
 - statement of commitment to undertaking a minimum of 35 hours of CPD in the coming year
 - a log of CPD activities undertaken during the past year
 - consent to the Institute making enquiries to validate the statements made.
- The log of CPD activities is maintained by members. It is permissible for the required 35 hours to be averaged over 3 years - e.g. year 1 - 30 hours, year 2 - 40 hours, year 3 - 35 hours.
- **Acceptable** CPD activities must be related to the profession and / or one of the stated functional specialisms, and include:
 - attendance at conferences, seminars, workshops etc. as a delegate or trainer
 - writing / publishing articles, monographs etc.
 - structured private reading (not more than 50% of total CPD requirement)

- technical committee work
- formal study or training (including distance learning).

- **Unacceptable** CPD activities include:
 - general reading of business press
 - social activities
 - anything unrelated to the profession and/or one of the stated functional specialisms.

- A random sample of returned CPD forms are audited and any members found to be either non-compliant or having knowingly returned an incorrect form will be subject to disciplinary procedures.

- The administration of the system requires a CPD controller / administrator and an audit panel.

The IMC in Britain, which has over 3,000 members, is considering a more structured set of CPD requirements. The IMCI has yet to implement it.

7. APPENDICES

APPENDIX ONE: *SURVEY QUESTIONNAIRE*

APPENDIX TWO:

IMCI ANNUAL AFFIRMATION AND CPD LOG