



National Commission for
**Further and
Higher Education**
Malta

GRADUATE TRACER STUDY

FINAL REPORT

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carried out with the support of the
Erasmus+ programme of the European Union



MINISTRY FOR EDUCATION AND EMPLOYMENT



National Commission for Further and Higher Education
Alamein Road, Pembroke PBK 1773, Malta
T: +356 2381 0000
E: ncfhe@gov.mt

www.ncfhe.gov.mt

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FOREWORD

This study was the first of its kind in Malta, aiming to address the main challenges for Malta's higher education system. It provides a snapshot of the path students take both before and after graduation, highlighting the hurdles encountered in a quest to assist stakeholders in the decision making process.



This research project further emphasised the importance of the role of education providers in the sector. They have the potential of playing a major role in preparing students to search for employment through job fairs, career guidance or sessions on job search strategies. Such contribution is still rather low, since graduates who answered this survey stated that the help received by their education provider to find employment was relatively insignificant. Education providers play an equally important role in training graduates for a wide range of skills that are needed for success in life in general, and in employment in particular.

Furthermore, flexible pathways and modes of study in Further and Higher Education are important to allow students to enter, leave and re-enter education and to reconcile studies with other commitments they may have. This will ultimately contribute towards reducing the rate of early school

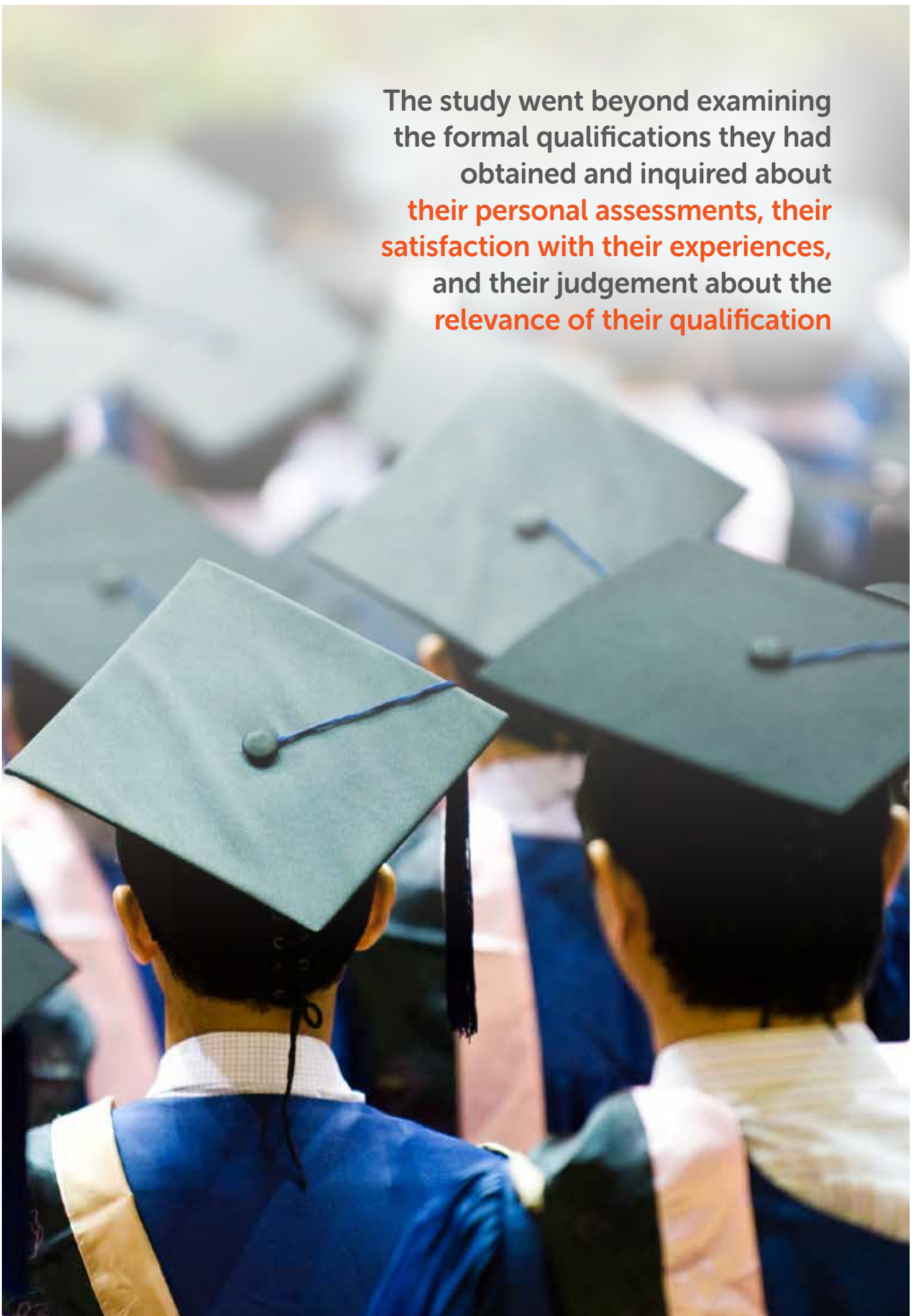
leavers that means to 10% by 2020, as outlined in the EU2020 Strategy.

I would like to thank all those participants who contributed in this project by filling out the online questionnaire. Without their support, it would have not been possible for us to understand the difficulties they encounter and identify areas for improvement. This study also served as learning experience regarding nationwide graduate tracer studies in Malta. Special thanks also go to the Research and Policy Recommendation Unit within the NCFHE, who have dedicated their energy towards this research project.

Ms Edel Cassar

*CEO, National Commission
for Further and Higher Education*

The study went beyond examining the formal qualifications they had obtained and inquired about **their personal assessments, their satisfaction with their experiences,** and their judgement about the **relevance of their qualification**



AUTHORS' NOTE

The issue of graduates' employability, career patterns, and progression in the labour market has gained particular importance on the European Commission agenda for EU countries in general and for Malta in particular.

Within the scope of the European Employment Strategy, the Commission adopted in March 2015 a proposal for new policy guidelines targeting four key domains including the objective to enhance "labour and skills supply by addressing structural weaknesses in education and training systems and by tackling youth and long-term unemployment."¹ This issue was further discussed in the Yerevan ministerial conference held in May 2015 where it was stressed that there is a need to ensure meaningful information is available on graduates' experiences in the labour market after completing their studies.²

In view of the above, and with the support of the Erasmus+ KA3 project, the National Commission for Further and Higher Education in Malta conducted this graduate tracer study for students from all levels and types of qualifications who completed their study programmes in 2013/2014. Our main aim was to provide information about the situation for graduates after completing their studies; thereby, helping all stakeholders in taking informed decisions in relation to the transition from education to employment. We also took this research project as a learning opportunity to test the feasibility of a national graduate study in Malta and to identify potential challenges in this regard.

For this purpose, through the use of an online questionnaire, we collected extensive data about the graduates by different socio-economic, study and employment related characteristics. We presented all the data collected as custom tables as appendix to the full report which is made available on the NCFHE website, hoping that our readers will make further use of this invaluable data to guide them in their decisions as students, employers, parents, and policy makers.

We would like to highlight the importance we gave to the students and graduates' perceptions about all issues discussed in this study. We went beyond examining the formal qualifications they had obtained and inquired about their personal assessments, their satisfaction with their experiences, and their judgement about the relevance of their qualification. We believe that we can understand better any aspect related to students and graduates only if we see it through their eyes.

Last but not least, we wish to express our gratitude for the support we received from the participating educational institutions that helped us contact and follow up their graduates. Our thanks are due as well to the persons who provided us with feedback and advice throughout the project.

1 The European Employment Strategy available on <http://ec.europa.eu/social/main.jsp?langId=en&catId=101>

2 EHEA Ministerial Yerevan Communiqué, May 2015 available on http://www.ehea.info/Uploads/SubmittedFiles/5_2015/112705.pdf

Research and Policy Unit

National Commission for Further and Higher Education

KEY FINDINGS

An online survey was used to collect the data from the graduates. The initial target population was all students who completed their studies in Malta in the years 2013 and 2014. Graduates of all academic and vocational licensed further and higher education institutions and from Malta Qualifications Framework (MQF) levels 1 up to 7 were targeted. The survey was intended as a onetime cross-sectional tracer study done one to two years after completion of studies.

The data collected contained factual information about the graduates as well as their personal perceptions and assessments.

The findings arising from the survey are structured in this report in 4 sections covering:

1. Demographic characteristics;
2. education background and plans for future studies;
3. mobility during and after completion of studies; and
4. transition into the labour market.

These key findings focus specifically on graduates' education background; graduate mobility and their transition into the labour market.

Graduates' education background

- **Type and field of studies:** While 18.7% of all graduates pursued studies in the field of social sciences, business and law, 30.7% of graduates from private institutions had undertaken qualifications in this field. Along with graduates from general education, probably Sixth Form graduates, this made up almost 75% of private institutions' graduates.
- **Type of qualification:** 72% of the respondents completed their qualification in 2013/2014 at an

academically oriented institution. A total of 162 out of 236 graduates (68.6% of the total) are those who followed an academic education in their further as well as higher education. 37 graduates are those who had a vocational education in both further and higher education which forms 15.6% of the total.



As for those who completed an academic post-secondary education and then changed to vocational for higher levels, these form 16.5% of the graduates with academic post-secondary education (32 out of the 194). However, only 5 graduates, which form 11.9% of those who had a vocational further education, then pursued an academic higher education.

- **Status and mode of study:** Among all the graduates, 91.8% followed their programme on campus, 6.1% of them through blended learning, and 2.1% through distance learning. Private institutions are more flexible in terms of the mode of attendance with only 69.6% of their graduates reporting to have followed their programme on campus. Similarly, graduates, who followed their programme on a part-time basis, report more often to have followed their programme through blended (23.1%) or distance learning (12.9%), while only 64.0% undertook their studies on campus.
- **Funding of studies:** The funding sources most frequently mentioned by graduates are Stipend/student maintenance grants

(80.6%), parents and family (50.8%), own savings (40.8%), and paid employment (33.6%).

- **Activities during studies:** When asked about work placements undergone during their studies, 22.3% of them had a compulsory work placement, and 23.8% had a voluntary work placement, while almost 54% of graduates did not undertake any work placements. Moreover, 34.1% of graduates were involved in student representation during their studies.
- **Reasons for studies:** The reasons most frequently chosen by graduates for undertaking their studies are acquiring better career prospects (62.2%), gaining access to further studies (61.2%), gaining more qualifications for personal development (59.4%), gaining more expertise in a particular field (47.5%) and acquiring a higher income (27.7%).
- **Assessment of studies:** Graduates were asked to retrospectively assess their education experience. Most graduates (86.4%) would have chosen the same study programme and 83.4% the same institution.
- **Skills acquired during studies:** In general, graduates rated most positively the extent to which they learned; how to organize and plan, their command of their field of study, and their ability to assess own knowledge and learn independently. However, the skills rated most negatively are the intercultural skills as well as the preparation for work.
- **Further studies:** Graduates were asked whether they had continued their studies after completion of their 2013/2014 qualification. Out of all graduates, 66.7% were enrolled in further studies at the time of taking the survey. Out of all those graduates, who did not continue their studies after completion of their qualification, 76% of them replied that they had plans to continue their studies. As for those who had no plans for furthering their studies, the reasons most commonly mentioned were current employment, time limitations, and financial constraints.



Graduate mobility during and after completion of studies

- **Mobility during studies:** Almost 85% of graduates had had no mobility period abroad during their studies they completed in 2013/2014. The highest share of those who were abroad had an internship or a work placement (32.4%), 23.9% of them went abroad for a conference, and 17.2% of them for a whole semester abroad.
- **Mobility after studies:** Out of all those graduates, who continued their studies after completion of their qualification in 2013/2014, 8.9% are currently undertaking their studies abroad. Studies abroad are more frequent among those graduates currently pursuing a Masters (20.9%) or Doctorate (58.3%)

Transition into the labour market

- **Employment situation:** It was found that 39.6% of all graduates were not engaged in any employment at the time of the survey, a total of 60.4% of all graduates were in some form of employment. Graduates from education (100% of them), health and welfare (91.6% of them) and social sciences, business and law (83.6%) were more likely to be employed than their peers from the other fields of study. Out of all graduates from the Northern Harbour, only 19.7% are employed in the public sector. This is by far the lowest among all other graduates' home districts. Graduates from the Southern Harbour are those most likely to be in the public sector (47.8%).
- **Occupation:** Half of the employed graduates were found to be in managerial (9.9%) or professional (41.5%) occupations. Around 45% of them are technicians and associate professionals (10.7%), clerical support workers (17.9%) or services and sales workers (16.6%). Only 3.5% of the employed graduates are working at more elementary occupations.

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- **Income:** 45.7% of the employed graduates have an income of less than 15,000 Euros per year. As for those graduates, who earn more than 30,000 Euro, these form a share of 5.9% of the total. The rest, notably 48.4% of the total, earn between 15,000 and 30,000 Euro annually.
- **Previous employment:** There appears to be a positive link between graduates' previous work experience and their current employment status, whereby graduates having previous work experience are more often employed. In fact, 72% of graduates who had past work experience with at least one job for 12 months or more were employed at the time of the survey. In comparison, 58% of those who had work experience but never had any jobs that lasted for more than a year, and 52.3% of those who had no labour market experience were employed at the time of the survey.
- **Time to start employment:** When comparing the start dates of the current employment for the 472 graduates, who mentioned that they were employed; almost 71% of them had started after completing their studies, 4% at the time of completion, and 25% of them had retained the job they had during their studies. Of those graduates, who took up their employment after graduation; 47% of them had found employment in the first 12 months after completion of studies and around 22% took between 1 and 2 years.

The mean duration taken to find employment for all graduates, who started employment either directly upon or after they completed their studies, was 9.74 months.

- **Search for employment:** Irrespective of their employment situation, only 14.7% of graduates declared to be searching for employment. Almost 37% of those who are not searching for a job were not engaged in any employment. These are mostly graduates from lower education levels who wanted to further their education rather than be in employment. Only 10 graduates from all the respondents were inactive at the time of the survey in the sense that they were not enrolled in further studies, not engaged in any form of employment and not searching for employment. Graduates most often search for employment by visiting the internet sites of potential employers (75.4%), by replying to job advertisements in print media or on the internet (62.9%), by making spontaneous applications to businesses (53.1%) or through personal contacts (40%).
- **Difficulty finding employment:** Graduates who found the job search to be difficult or very difficult were asked about the reasons for their perception. The reason most frequently selected was the lack of professional experience which was mentioned by 65.7% of graduates, who considered their job search as difficult or very difficult. Another reason frequently mentioned is the chosen field of study (51.8%). Respondents also frequently cited the lack of jobs in their major area (47.0%) and in Malta in general (44.8%) as reasons for their difficulty in finding employment.
- **Relationship between studies and employment:** Out of all employed graduates, 45.7% declared that their qualification was not required for their job and 63.8% stated that they did not require any additional courses for their job. Graduates generally perceived the relationship between their studies and their employment to be average to slightly positive.

- **Job satisfaction:** In order to capture the reasons for the graduates satisfaction or dissatisfaction with their employment, they were asked to rate different aspects of their employment. Graduates rated well their overall job satisfaction. However, the salary level and opportunity for promotion seemed to be the aspects with the lowest levels of satisfaction among graduates.



INTRODUCTION

Background

In an attempt to respond to the key challenges related to the demographic changes in societies and the changing needs of the labour market, the European education policies and programmes have been encouraging reforms that aim to improve the education systems' efficiency to decrease youth unemployment rates, and develop graduates' social capital, as well as their knowledge, skills and competences needed in a competitive labour market. With its general objective of providing support toward the achievement of the targets of the Europe 2020 strategy, the Erasmus+ programme has further specific objectives in the field of education and training, namely "to improve the level of key competences and skills with regard to their relevance for the labour market and their contribution to a cohesive society, in particular through increased opportunities for learning mobility and through strengthened cooperation between the world of education and training, and the world of work."³ This is in line with the Bucharest Communiqué in 2012⁴ which sheds the light on the need to develop the personal and professional skills of graduates through tighter cooperation between the students, the educational institutions and the employers.

The National Commission for Further and Higher Education, as the National Agency for

the Erasmus+ Key Action 3 project: Support to the implementation of the European Higher Education Area (EHEA) reforms, has been involved in a number of activities supporting the implementation of the Bologna Process in Malta.

The main rationale of these activities is to address the two central challenges for Malta's higher education system as identified in the Bologna implementation report (EACEA, 2012); the low higher education attainment and participation rates and the quality assurance system which is still being consolidated.⁵

In view of developing a better understanding of the effects of the Maltese education system on employment, Malta has been recently witnessing a growth in the interest of stakeholders in graduate tracking and their employability. Indeed, data collection on labour market outcomes of higher education attainment through graduate tracer studies and research on skills supply and demand in the labour market are two measures identified in the Higher Education Strategy for Malta⁶ to increase employability and entrepreneurship.

3 *European Commission (2013) 2014 Annual Work Programme for the Implementation of Erasmus+, the Union Programme for Education, Training, Youth and Sport.*

4 *Ministers of Higher Education (2012) Making the Most of our Potential: Consolidating the European Higher Education Area, Bucharest Communiqué, EHEA Ministerial Conference, Bucharest*

5 *EACEA / Eurydice / Eurostat / Eurostudent (2012): The European Higher Education Area in 2012: Bologna Process Implementation Report, Brussels, Eurydice, available online at: [http://www.ehea.info/Uploads/\(1\)/Bologna%20Process%20Implementation%20Report.pdf](http://www.ehea.info/Uploads/(1)/Bologna%20Process%20Implementation%20Report.pdf), last accessed 30 July 2015.*

6 *National Commission for Further and Higher Education (2015): Higher Education Strategy for Malta within the context of the Further and Higher Education Strategy 2020 (NCHE, 2009) and the Framework for the Education Strategy for Malta 2015-2024, Malta, 2015, available online at: <http://ncfhe.gov.mt/en/resources/Documents/Strategy%20Documents/Higher%20Education%20Strategy%20for%20Malta.pdf>, last accessed 15 June 2016.*

This graduate tracer study, therefore, delivers specifically on one of these measures. It also coincides with a number of related studies which aimed to analyze the graduates' performance on the labour market.

However, to date, graduate studies in Malta have been limited to a particular institution or a particular faculty, such as the ones conducted by the University of Malta⁷. In October 2015, the Employment and Training Corporation (Jobsplus) launched the Employability Index for 2015⁸ which collected and analyzed data from the educational institutions on former University of Malta, MCAST (Malta College of Arts Science and Technology) and ITS (Institute of Tourism Studies) students who completed their studies in 2012/2013 and started their employment after completion of studies. Graduates were categorized into four groups to identify the relationship between the field and level of their studies, and their employment after graduation. Furthermore, under the scope of this Erasmus + project, another related study was conducted by the National Commission on Further and Higher Education (NCFHE), Employment and Training Corporation and Malta Enterprise. Data from the employers in different sectors of the Maltese economy was collected on recent recruitments, types of vacancies that are hard to fill and the reasons for such situations. It also collected data on the level of qualifications held by employees in different sectors of the Maltese economy, their knowledge, skills and competences as well as their training needs during their employment.

In view of developing a better understanding of the effects of the Maltese education system on employment, Malta has been recently witnessing a growth in the interest of stakeholders in graduate tracking and their employability.

In the last Further and Higher Education Statistics Report for 2014/2015, conducted by the NCFHE in collaboration with the National Statistics Office (NSO), data about graduates was collected from the education providers for the first time. This data consisted of a headcount by study-related characteristics of the students who had successfully completed their programme of study during the academic year 2014/2015.

The following graduate tracer study also coincided with the feasibility study of a European graduate study which was designed to explore the possibility of a graduate study across Europe⁹.

7 See: <http://www.um.edu.mt/sas/graduateresearch>

8 *Employment and Training Corporation (2015): Employability Index 2015, Malta 2015, available online at: http://Jobsplus.gov.mt/Resources/file/Resources/2015/October/Employability_Index_2015.pdf, last accessed 15 June 2016.*

9 Mühleck, K., Grabher, A., Hauschildt, K., Litofcenko, J., Mishra, S., Ryska, R., Unger, M., & Zelenka, M. (2016). *Testing the feasibility of a European graduate study. Final report of the EUROGRADUATE feasibility study. Hanover: German Centre for Higher Education Research and Science Studies (DZHW).*

The final report of this EUROGRADUATE feasibility study, which has been released in March 2016, recommends field tests as one of the measures to address the lack of information available about country-specific conditions for a European wide graduate data collection.

Although this project is not formally part of EUROGRADUATE, it serves as a country specific field test for Malta in the absence of any similar studies. Being the first experience of nation-wide tracer studies in Malta, this research project has been a learning experience as well as a pilot for future national graduate surveys.

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Research questions

This research project provided answers to the following questions:

1. What educational paths do graduates in Malta follow to progress from compulsory education to their final degree?
2. In what kind of activities are graduates engaged during their studies?
3. What factors influence the graduates' perspectives, assessment and motivations regarding their education experience?
4. What are the labour market outcomes of different education pathways in terms of career prospects, unemployment rates, time to employment and employment conditions?
5. What are the factors that affect the graduates' situation after completion of their studies?
6. How do graduates perceive the relationship between their studies and their employment?

METHODOLOGY

Data collection

An online survey was used to collect the data from the graduates. The initial target population was all students who completed their studies in Malta in the years 2013 and 2014. Graduates of all academic and vocational licensed further and higher education institutions and from Malta Qualifications Framework (MQF) levels 1 up to 7 were targeted. To ensure that all types of studies are covered within our survey, former Sixth Form students were contacted as well. The initial contact was initiated with the educational institutions and a total of five Sixth Forms, fourteen licensed providers and the three self accrediting institutions, the University of Malta, the Institute of Tourism Studies (ITS) and the Malta College of Arts, Science and Technology (MCAST), accepted to participate in the study.

The survey was intended as a one-time cross-sectional tracer study done one to two years after completion of studies. The data collected contained factual information about the graduates as well as their personal perceptions and assessments.

After drafting the questionnaire in August 2015, all the institutions that accepted to participate were invited for a consultation meeting on 25th August 2015. The purpose of this session was to inform the representatives about the tracer study details and their role in contacting the graduates and in promoting the survey. Furthermore, this session also served as a consultation with the participating institution regarding the questionnaire. Further consultation meetings were held with national experts to finalize the questionnaire.

Once the survey was available online in both Maltese and English, extensive technical

testing for routing and filtering was conducted internally followed by a pilot with students from the Institute of Tourism Studies.

The topics covered in the questionnaire include:

1. The graduates' demographic information;
2. The graduates' education history from post-compulsory education until the qualification obtained in 2013/2014;
3. Details about the study conditions of the qualification obtained in 2013/2014;
4. Activities during studies; student mobility, work placements, student representation;
5. The graduates' retrospective assessments of their study programme and skills acquired during their studies;
6. The situation after graduation, including additional studies;
7. The transition from education to employment and job search;
8. Graduates' employment history since their first paid employment;
9. Demographic and socio-economic background of graduates.

The corresponding institutions were contacted and given a choice between contacting their students directly and forwarding the links provided by the research team, or providing the NCFHE with the contact details of the graduates which allowed the researchers team to contact them directly.

Emails with the links to the survey were sent to graduates towards the end of October 2015.

The online survey was open for 8 weeks until the end of December 2015. Weekly reminder emails were sent to graduates who were contacted directly by the NCFHE, whereas those who were contacted by their institutions received only 2 reminder emails due to the institutions internal policies that limit the number of emails to be sent to their graduates.

Data cleaning and weighting

A total of 1,480 responses were received from the online survey. All responses that were missing information on the qualification obtained in 2013/2014 or those lacking information on the current employment situation were not considered for data analysis. Since the main aim of this study is to analyze the relationship between the degree obtained in 2013/2014 and the graduates' employment situation after their studies, these two variables were deemed crucial to consider a response as a valid one. As a result a total of 781 questionnaires were considered for the analysis as valid responses.

The research team had to rely on the most recent administrative data available on the graduates in Malta which was collected from all further and higher education institutions for the NCFHE Annual Statistics Report of 2014/2015. The 2014/2015 data is on graduates who completed their qualifications one year after graduates of 2013-2014 who make up the population of the current graduate survey (see Figure 1). Since there were no major differences in the education system between these two academic years, the 2014/2015 graduates could be considered to ensure representativeness of data. The total population of graduates in 2014/2015 was thus 9,129 excluding those who completed short courses and awards that are not level rated against the MQF. With the 781 valid cases obtained from the online survey, this represents a margin of error of 3.35% at 95% confidence interval. The sample was stratified by gender, level of education and age so as to ensure its representativeness over these important factors compared to the total population.



Furthermore, in order to ensure that responses are representative of the total target audience, the data throughout the report was cross-stratified and weighted against the data of the total population data.¹⁰

¹⁰ Initially the proportion of the subgroups in the survey data as a proportion of the total respondents (e.g. number of Females under 21 graduating from Further Education - 212 of 781, i.e. 27.1%) were adjusted to the same proportion in the administrative data (e.g. 2,098 of 9,129, i.e. 23.0%). In this example, the difference between the percentages was corrected with a weighting factor of the value 0.8. This was carried out for all subgroups. Following this application of weighting factors, the arithmetic mean of all cases was calculated. All values were adjusted in order for the arithmetic mean of all cases to be 1.

Figure 1: Distribution of graduates during the academic year 2014/2015 by gender, age and level of attainment (Administrative data)

GENDER	AGE IN BRACKETS	FURTHER EDUCATION	HIGHER EDUCATION	TOTAL
FEMALE	under 21	22.98% (n=2,098)	1.13% (n=103)	2,201
	21-25	2.45% (n=224)	17.43% (n=1,591)	1,815
	26 and over	0.45% (n=41)	9.78% (n=893)	934
MALE	under 21	19.6% (n=1,789)	1.15% (n=105)	1,894
	21-25	3.35% (n=306)	13.23% (n=1,208)	1,514
	26 and over	0.40% (n=37)	8.04% (n=734)	771
TOTAL		4,495	4,634	9,129

Figure 2: Distribution of graduates by gender, age and level of attainment (Survey data – valid responses)

GENDER	AGE IN BRACKETS	FURTHER EDUCATION	HIGHER EDUCATION	TOTAL
FEMALE	under 21	27.14% (n=212)	0.38% (n=3)	215
	21-25	4.87% (n=38)	18.82% (n=147)	185
	26 and over	1.92% (n=15)	10.63% (n=83)	98
MALE	under 21	10.88% (n=85)	0.26% (n=2)	87
	21-25	2.43% (n=19)	13.32% (n=104)	123
	26 and over	0.78% (n=6)	8.58% (n=67)	73
TOTAL		375	406	781

Responses were weighted based on this administrative data held by the NCFHE with regard to the gender of graduates, the level of education completed and the age of graduates in brackets (see Figure 1). These variables were used to compare it with the corresponding distribution of valid responses (see Figure 2).

The weighting performed, as will be noticed throughout the tables in the report, affected the total number of valid cases for different questions. This may be influenced by the missing cases and the rounding of weighted cases.

Key characteristics of graduates and their studies

The data in this report is displayed by specific recurrent groups which are divided into study-related characteristics and socio-demographic characteristics. Moreover, for the transition of graduates into the labour market the data was displayed and analysed based on work-related characteristics of graduates. Table 1 below explains these different groups. It is worth mentioning here that only selected tables and graphs are displayed in the report body and all the remaining tables are provided in the appendices at the end of the full report available on the NCFHE website.

Ethical considerations

The questionnaire was reviewed by the Office of the Information and Data Protection Commissioner and the processing operation for this research project carried out by the NCFHE was declared to be in line with the requirements of the S.L. 440.09, in particular regulations 4 (1), 4(2) and 8(1). Therefore, there were no data protection impediments for the NCFHE to carry out this research.

Respondents were informed of the voluntary nature of their participation and were advised to stop answering the questionnaire at any point they deemed necessary for them. They were also provided with a link at the end of all emails to opt out of subsequent emails should they wish not to be contacted any further.

The questionnaire developed for the project was anonymous. Data was captured from the respondents without any identification details, and all personal details were processed in an anonymous manner to ensure confidentiality. Responses were reported as aggregated data in group to ensure that the respondents could not be identified by the readers of the report. While analysing variables meeting a number of conditions, in some instances the numbers of valid respondents became too little to make any general statements. In such situations, no analysis was carried out.



Table 1 Key characteristics applied throughout the report

NAME OF VARIABLE	VALUES	EXPLANATION	
STUDY RELATED CHARACTERISTICS	Type of qualification	<ul style="list-style-type: none"> Academic Vocational 	The type of qualification obtained in 2013/2014 was categorized into vocational or academic based on the type of institution which delivered the corresponding study programme.
	Level of qualification	<ul style="list-style-type: none"> Further Higher 	The level of qualification obtained in 2013/2014 is divided into further or higher education. Further education includes those qualifications that are at Malta Qualifications Framework (MQF) levels 1-4. Higher education qualifications are at MQF levels 5-8.
	Student status	<ul style="list-style-type: none"> Full-time Part-time 	The status of the study programme followed until 2013/2014 is coded into full time or part-time studies based on the respondents' own classification of their study programme.
	Field of study	<ul style="list-style-type: none"> General Education Education Humanities and Arts Social Sciences, Business and Law Science, Mathematics and Computing Engineering, Manufacturing and Construction Agriculture Health and Welfare Services 	This characteristic aims at comparing the fields of study, using the international standard classification of education (ISCED 2011).
	Age brackets	<ul style="list-style-type: none"> 16-19 20-23 24-27 Above 27 	Age brackets were coded based on the age of respondents at the time of taking the survey.
SOCIO- DEMOGRAPHIC CHARACTERISTICS	Gender	<ul style="list-style-type: none"> Female Male 	-
	Higher Education background	<ul style="list-style-type: none"> With Higher Education Without Higher Education 	<p>STUDENTS WITH HIGHER EDUCATION background have parents of which at least one has attained a higher education degree (MQF levels 5-8)</p> <p>STUDENTS WITHOUT HIGHER EDUCATION background have parents whose highest educational degree is no higher than MQF level 4 (post-secondary non-tertiary education) for both parents.</p>
	Type of institution	<ul style="list-style-type: none"> Public Private 	<p>The two variables public and private refer to the type of institution attended to obtain the qualification completed in 2013/2014.</p> <p>In addition to the public institutions, a number of private further and higher education providers licensed by the NCFHE have also participated in the survey.</p>
	District of origin	<ul style="list-style-type: none"> Southern Harbour Northern Harbour South Eastern Western Northern Gozo and Comino 	Localities of the graduates' hometown of residence have been coded into six districts based on the Local Administrative Units of the National Statistics Office in Malta. These are for students who have been raised in Malta irrespective of their nationality.

* National Statistics Office (2014): Census of Population and Housing 2011. Final Report, Malta, 2014, p. xxxvii, available online at: https://nso.gov.mt/en/publicatons/Publications_by_Unit/Documents/O1_Methodology_and_Research/Census2011_FinalReport.pdf, last accessed 15 June 2016.

WORK RELATED CHARACTERISTICS

NAME OF VARIABLE	VALUES	EXPLANATION
Current employment situation	<ul style="list-style-type: none"> Working Not working 	<p>This variable is based on the answers provided by the graduates when asked about their current employment situation. 'Working' includes those who are employed or self-employed.</p> <p>Graduates currently not working or searching for employment were considered as 'not working'.</p> <p>Those who were employed but were on long leave at the time of the survey were considered as missing cases in the statistical analysis.</p>
Start of current job	<ul style="list-style-type: none"> Before completion of studies After completion of studies 	<p>Graduates were asked about the date they completed their studies and the date they started their current main employment.</p>
Work experience	<ul style="list-style-type: none"> Previous work experience with permanent job Previous work experience without permanent job No previous work experience 	<p>Graduates were asked to provide the start and the end date of each of any previous employment they had for more than 3 months.</p> <p>Employments that lasted 12 months or more were coded as permanent jobs and those that lasted for less than 12 months were coded as non-permanent jobs.</p> <p>Graduates who had at least one permanent job were considered as with a permanent job.</p> <p>Graduates, who had work experience, but did not hold any employment for at least 12 months, were coded as previous work experience without permanent job.</p> <p>All graduates without any work experience were coded as no previous work experience.</p>

CHAPTER 1

RESPONDENTS' SOCIO DEMOGRAPHIC PROFILE

1.1. Age profile of graduates

After data weighting as explained in detail in the methodology section, the total number of graduates is 781 with 35.1% of them aged 20-23 years old, while a third of them (31.3%) constitute the youngest age group, 16-19. The graduates over 27 years of age make up the smallest share of 13.1% of the total respondents.

1.2 Gender

The distribution of graduates by gender across most age groups is in line with the proportions of females to males in the total population of graduates (54% females and 46% males). The average ages of both females and males, as seen in Table 3, as well as the median and the standard deviation are very close for both genders. The former have a mean age of 23.60 compared to the latter with an average of 23.77.

1.3. Type of qualification

As can be seen in Table 7, 72% of the respondents completed their qualification in 2013/2014 at an academically oriented institution. The share of academic qualifications is highest among the youngest age group (16-19) from which only 10% (24 out of 244) were in vocational programmes. The 221 students from this group who completed an academic qualification are those who were in Sixth Forms and obtained their A levels/MATSEC certifications. The 10% who completed a vocational degree are

divided among those who completed a VET level 3 Diploma, or an Extended level 4 VET diploma. Few of them completed Introductory and Foundation certificates rated at MQF levels 1 and 2. However with increasing age of graduates, one notices an increase in VET participation which reaches 37% (99 of 274) for 20-23 year old graduates and 46% for those aged 24-27. Furthermore, the age group which has the highest participation in academic education is that of graduates aged between 16 and 19 followed by those aged 20-23 years old. On the other hand, the highest participation in VET may be noted in age group 20-23 followed by graduates aged 24-27. This suggests that students following the academic path in their post-secondary education tend to be younger, while those following vocationally pathways tend to be older. This may be due to the difference in the overall duration of academic and vocational further education programmes or it might suggest that students move from academic Further Education to VET providers for higher degrees.

For the age group of graduates over 27 years of age, the share of graduates in VET programmes falls again because the VET provision at higher MQF levels is limited when compared to further education. The vast majority of respondents over 27 who completed a vocational qualification had obtained a qualification less than MQF level 6. This suggests that those graduates were mature students in second chance education or those graduates who already had higher degrees but were studying for additional awards at lower MQF levels.

Figure 3: Age profile of graduates by gender, qualification level, status and type of institution

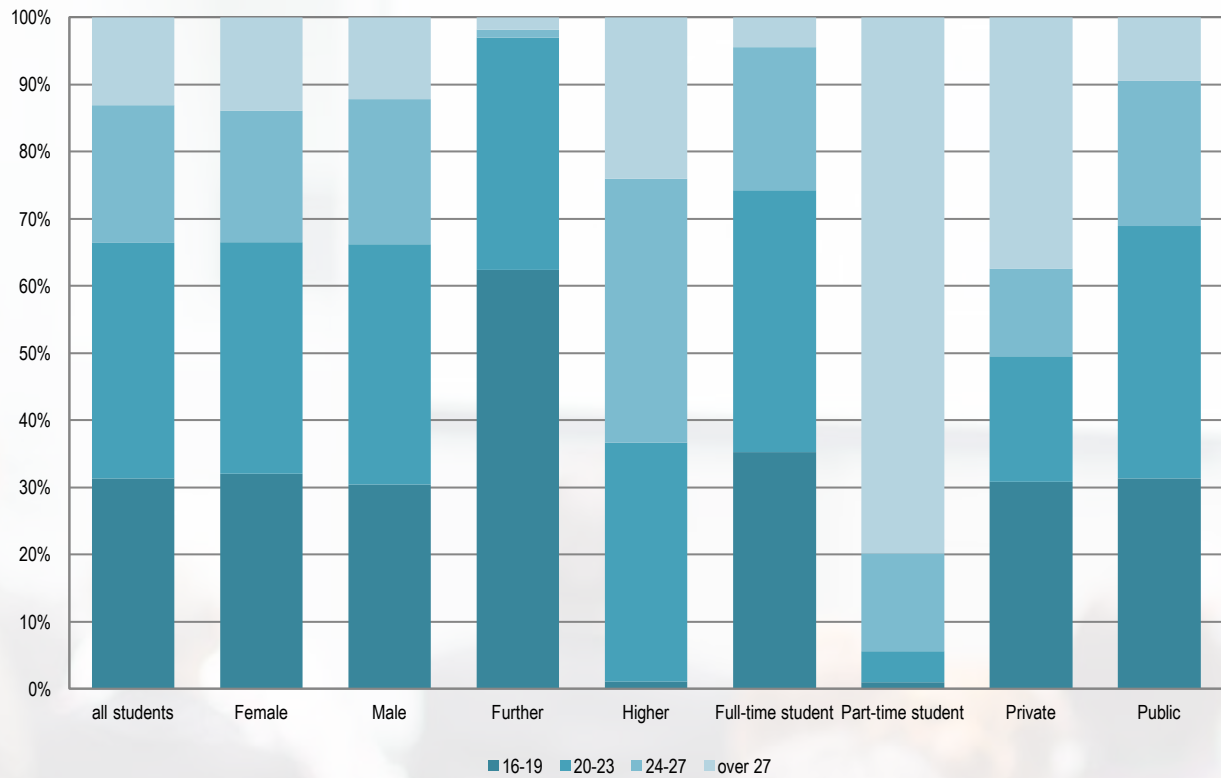


Table 2: Age profile of graduates by gender, qualification level, status and type of institution

	ALL STUDENTS	FEMALE	MALE	FURTHER	HIGHER	FULL-TIME STUDENT	PART-TIME STUDENT	PRIVATE	PUBLIC
16-19	244	135	109	240	4	244	1	32	213
20-23	274	146	128	133	141	269	4	19	255
24-27	160	83	78	5	156	147	13	13	147
OVER 27	102	59	43	7	96	31	72	38	64
ALL STUDENTS	781	423	358	385	396	691	90	103	678
AVERAGE	23.68	23.60	23.77	19.94	27.30	22.05	36.19	27.61	23.08
MEDIAN	22.00	22.00	22.00	19.00	24.00	20.00	35.00	24.00	22.00
STANDARD DEVIATION	7.20	6.98	7.46	2.99	8.17	4.73	10.14	10.85	6.27

1.4. Level of qualification

When comparing the distribution of graduates between further and higher education, those from the younger age groups tend to form the highest shares of further education (average age 19.94) and the older groups form the largest share of higher education graduates (average age 27.30). Those aged 16-19 who are in higher education are those that completed an MQF level 5 qualification. As for the older groups who completed a further education qualification, these were mostly mature students or graduates who already had higher level degrees but were following an award at a lower level or an additional qualification in addition to their initial degree. The standard deviation of graduates' ages of those from higher education is considerably larger than their counterparts from further education (8.17 vs. 2.99) which is explained by the more diverse student population who follow higher education when compared to the relatively homogeneous student population in further education.

1.5. Student status

Students' age also affected the status of the study programme followed where almost all students who are below 24 followed their courses on a full time basis. However as the graduates get older, they tend to follow their studies more often on a part-time basis. Around 80% of part-timers are those who are above 27. This is also evident in the mean ages of each group, where those who followed part-time courses were, on average, 36.19 years old and full-timers were 22.05 years old. This can be explained by the fact that programmes at lower levels such as post-secondary education, tend to be offered only on a full time basis. Moreover, older students, who probably have more responsibilities related to their employment and families, tend to choose flexible courses which do not demand full-time availability.

1.6. Subject area

In total, the fields which have the lowest shares of graduates are services (20 out of 781 which is 2.56% of the total) and education (25 out of 781 which is 3.2%). As for the fields with the highest shares of graduates, social sciences, business and law (18.7% of the total) and general education (40% of the total) have the most graduates. When differentiated by age groups, the youngest graduates (aged 16-19) form the highest shares (70%) of those who completed a qualification in a general field of study such as MATSEC. The oldest age groups tend to form higher shares in the fields of education, health and welfare, and social sciences, business and law than other fields of study. There are no graduates from the field of agriculture.

1.7. Education background of graduates' parents

More than 65% of all students (436 out of 667) have parents without higher education whereas 34.6% of the total (231 out of 667) are from a higher education background. There are no variations for this distribution across age groups except for those above 27 years old who have a higher share of graduates without a higher education background (77% of all those aged above 27). Furthermore, graduates from higher education backgrounds are on average (mean age 22.51) younger than their counterparts without a higher education background (mean age 23.96). This can be explained by the relatively recent widening and expansion of higher education participation in Malta which might have benefitted the parents of the younger students more than it did for older graduates.

The educational background of graduates' parents is displayed by study-related characteristics. It was shown that older graduates tend more often than their younger counterparts to have parents without a higher education background.

This age effect is also shown in graduates who followed their studies part-time and are more often without higher education background.

A further difference is observed between academic and vocational types of qualifications, where 78.8% of vocational graduates are without higher education backgrounds compared to 67.4% of graduates from academic qualifications.

The higher share of young graduates in academic oriented programmes was obvious in the data collected. This distribution can also explain the higher share of graduates from the academic programmes having parents with higher education. An additional explanation might be that graduates without higher education backgrounds tend to favour vocational institutions as a more familiar and accessible study environment.

As for the education background of graduates by type of education provider, 34.7% of graduates from private institutions have higher education backgrounds whereas 28.7% of those from public institutions have parents with higher education. Further analysis shows that these are mainly the graduates from private Sixth Forms whose age group (16-19) have higher shares of parents with higher education.

1.8. Type of institution

The majority of graduates (678 out of 781) attended a public institution. When compared across age groups, the shares of 16-19 year olds and those over 27 make up the highest shares of graduates who attended a private institution. For the youngest age group, this is due to students from private Sixth Forms. As for those who are above 27 years old, around half of them completed an MQF level 7 qualification. The rest of them are either mature students who got back to education and completed a VET qualification at Further Education level or those who completed an MQF level 5 qualification although they had a different initial degree at a higher MQF level. This suggests that private providers seem

34.7%
of graduates from
private institutions
have higher education
backgrounds whereas

28.7%
of those from public
institutions have parents
with higher education

to cater effectively to the needs of a diverse student population either those that are older and need more flexible provision in terms of workload and time requirements, or those mature students that need a second chance to enter formal education, or those that are interested in lifelong learning and acquiring new skills. In fact, this is also supported by the higher average age of graduates from private (27.61) as opposed to public providers (23.06). Public institutions seem to have a distribution of graduates by age group which is more in line with the distribution of the total population.


1.9. Graduates' district of residence growing up

As for the graduates' distribution by district of origin, the highest share (28.5%) is from the Northern Harbour region and the lowest participation is from Gozo and Comino (3.4%). As for the average ages, graduates who come from the Southern Harbour region are on average older than the total population (mean of age 25.22 compared to the total average of 23.68).

As for the age distribution by district of origin, it seemed that young graduates are overrepresented in all regions with the exception of those from the Southern Harbour who have high shares in the older groups.

Table 3: District of residence growing up compared to present district of residence by level of education completed in 2014

Level of education completed in 2014	District of residence growing up	Present district of residence						Total
		Southern Harbour	Northern Harbour	South Eastern	Western	Northern	Gozo and Comino	
Further	Southern Harbour	94.0%		4.0%	2.0%			100%
	Northern Harbour	0.9%	93.0%	0.9%	2.6%	2.6%		100%
	South Eastern	3.1%		96.9%				100%
	Western		3.4%		96.6%			100%
	Northern		1.6%		3.2%	95.2%		100%
	Gozo and Comino		14.3%	14.3%			71.4%	100%
	Total		14.0%	30.8%	18.8%	17.6%	17.4%	1.4%
Higher	Southern Harbour	80.6%	4.2%	8.3%	1.4%	5.6%		100%
	Northern Harbour	1.1%	79.3%	1.1%	10.9%	7.6%		100%
	South Eastern	4.3%	2.2%	87.0%		4.3%	2.2%	100%
	Western		1.4%	1.4%	91.4%	5.7%		100%
	Northern	1.9%	1.9%			96.3%		100%
	Gozo and Comino		44.4%		5.6%		50.0%	100%
	Total		17.6%	24.7%	13.6%	21.6%	19.6%	2.8%
Total	Southern Harbour	86.1%	2.5%	6.6%	1.6%	3.3%		100%
	Northern Harbour	1.0%	86.9%	1.0%	6.3%	4.9%		100%
	South Eastern	3.6%	0.9%	92.8%		1.8%	0.90%	100%
	Western		2.3%	0.8%	93.8%	3.1%		100%
	Northern	0.9%	1.7%		1.7%	95.7%		100%
	Gozo and Comino		36.0%	4.0%	4.0%		56.0%	100%
	Total		15.8%	27.8%	16.2%	19.6%	18.5%	2.1%



This is in line with the widening access and participation that Malta has been witnessing in the last decades which is still encouraging higher shares of people to pursue post-compulsory education. In the Southern Harbour region, almost half of them are studying at MQF levels 1-5 which suggests that these are mature students or those who are returning back to formal education after some interruption.

When comparing the level of attainment by home district of residence, there appear to be statistically significant differences between regions (Pearson Chi-Square 0.004). It appears that graduates growing up in the Southern Harbour, Western region or in Gozo and Comino are over-represented among Higher Education graduates. Bearing in mind the higher average age of graduates from the Southern Harbour region (25.22 years compared to 23.68 among all graduates) and their over proportional representation among part-time students (22.4% among all graduates having studied part-time compared to 17.4% among all graduates), graduates from the Southern Harbour region appear to confirm the earlier finding that graduates from the Southern Harbour region tend to be more often mature students and those returning to formal education.


In general, most of the graduates were from a general education field. Those are the graduates who had completed their post-secondary education with a Matriculation Certificate for example. The field of social sciences, business and law also had the highest share of the total graduates. It is also interesting to note that there seemed to be fields of study that are more popular among graduates from some districts. For example, graduates from the Northern region and from Gozo and Comino were over-represented among those who had a qualification in the field of health and welfare, and engineering,

manufacturing and construction. Graduates from the Northern Harbour and from the Western region were over-represented in the services field and that of social sciences, business and law. Graduates from the Southern Harbour and South Eastern region were relatively more frequently represented among the field of education, humanities and arts, and that of sciences, mathematics and computing.

It is also interesting to note that the Northern Harbour graduates form a considerably higher share among graduates from private institutions (39.8%) than their share among all graduates (28.5%). On the other hand, graduates from Gozo and the Northern and Western region are under-represented among graduates from private institutions.

The internal migration of graduates is analyzed by comparing their district of residence growing up compared to their district of residence after completion of their studies. It is evident that graduates who originally lived in Gozo and Comino, or in Northern Harbour and Southern Harbour changed their districts of residence more often than graduates from other districts. The Northern Harbour district seems to be the most attractive areas for those who moved residence.

Particular attention was given to the difference between graduates holding different levels of qualifications. It appears that those who completed further education qualifications tended to remain more often in their home district of residence. However, graduates who completed higher levels of qualifications moved more often to a different district of residence. This may be due to the high incidence of graduates from Sixth Forms among graduates from Further Education. These may have remained living in their home district of residence throughout



their studies, while graduates from higher education may have more often established their own household and may have done so in another district probably moving closer to the areas where they are employed. Moreover, residents from Gozo wishing to further their studies at Higher Education level are likely to have done so in Malta, requiring them in most cases to relocate to Malta.

1.10. Nationality

Following the United Nations Statistics Office's division of regions based on the geographical locations of countries of origin, there are 95.5% of graduates who are Maltese. The remaining 4.5% are divided between Eastern European graduates (mainly from Bulgaria and Romania) and those from the UK and Germany. The composition of the foreign students in terms of age, degree level, or field of study is quite heterogeneous which suggests that Malta is not targeted by foreign students for a specific education field or type.

1.11. Graduates with children

There is a significant relationship between the graduates' age group and having children (Pearson Chi-Square 0.000). The share of graduates below the age of 27 who have children is less than 1.5% (10 out of 680), while 45% of graduates over 27 (46 out of 102) have children. This significant increase after the age of 27 is observed for both males and females although only around 35% of females over the age of 27 have children in contrast to 58% of males of that same age group. A possible explanation might be that females tend more often than males to pause or stop their education career to take care of their families.

When dividing the data by study related factors and socio-economic characteristics of graduates, it is evident that all groups who have a higher participation of the older graduates tend to have more graduates with children. Graduates who obtained a further education qualification, or those who have higher education backgrounds, have lower than average shares of graduates who are parents. Whereas those graduates, who studied part-time, were from the fields of social sciences, business and law, or who attended private institutions, have above average shares of graduates with children.

CHAPTER 2

EDUCATION

2.1. Qualification obtained in 2013/2014

Subject area

Analyzing the numbers and percentages by level of qualification (further/higher) shows that almost 80% of those who completed Further Education followed programmes in General Education. These include the matriculation certificates as well as the secondary education certificates. The remaining 20% of graduates are those from vocational further education qualifications. As for graduates of Higher Education qualifications, the field of social sciences, business and law has the highest share of graduates (34.6%) followed by science, mathematics and computing (18.4%), and humanities and arts (15.8%).

There appear to be differences in the subject area pursued by females and males. In particular, the fields of social sciences, business and law (21.5% of females), humanities and arts (12.2% of females), health and welfare (7.9% of females) and education (4.5% of females) tend to be more popular among females than males. On the other hand, science, mathematics and computing (16.2% of males) and engineering, manufacturing and construction (15.4% of males) are those fields that are most popular among males.

There also appear to be notable differences in the subject area pursued by graduates from public and private providers. This is evident in particular for graduates from Social sciences, business and law. While 18.7% of all graduates pursued this field of study, 30.7% of graduates from private institutions undertook qualifications in this field. Along with graduates from general education, probably Sixth Form

graduates, this makes up almost 75% of private institutions' graduates. In comparison, the distribution of graduates from public institutions across the fields of study seems to be more in line with the total distribution of graduates by fields of study.

Student status

Out of all graduates, 11.5% followed their study programme on a part-time basis. Graduates who followed their courses on a part-time basis were more often at higher education level (21.1%), in programmes in the field of education (30%) or Social sciences, business and law (27.2%) or were enrolled in private institutions (44.7%). All these groups also have high shares of older students, which suggests that there is a link between the age of the student and the status of the programme followed. Part-time studies offer a convenient opportunity for those older students who have work and family commitments and have limited time to dedicate to their studies. It appears that private providers cater in particular to these needs, since part-time programmes seem to be more popular among private providers at higher education levels.

Educational pathway

An issue that was worth investigating was the permeability between different levels and types of education providers, notably academic and VET providers. The 2010 Bruges communiqué and Europe 2020 strategy shed light on the importance of having a permeable system of education to encourage lifelong learning and allow ample choice and flexibility for learners to choose the education path that best suits them.

Table 4: Type of higher education pursued by type of post-secondary education attained by graduates

TYPE OF HIGHER EDUCATION PURSUED	TYPE OF POST-SECONDARY EDUCATION ATTAINED					
	Academic post-secondary education		Vocational post-secondary education		Total post-secondary education	
	Headcounts	%	Headcounts	%	Headcounts	%
ACADEMIC HIGHER EDUCATION	162	83.5%	5	11.9%	167	70.8%
VOCATIONAL HIGHER EDUCATION	32	16.5%	37	88.1%	69	29.2%
TOTAL HIGHER EDUCATION	194	100.0%	42	100.0%	236	100.0%

This kind of free movement between types and levels of education removes institutional barriers and avoids segmenting education and training provision.¹¹

The education paths followed by graduates are here defined as the type of education followed as they proceed from post-secondary to higher education. Graduates could either have followed an academic path throughout, or a vocational path throughout. They could have also switched between both after post-secondary education. There seems to be a cultural divide between both types of education where those without higher education background are much more likely to join vocational study programmes (22.7% of them) than those with higher education background (7.5% of them). Furthermore, graduates from the Southern Harbour and the South Eastern region are more likely to be in vocational oriented programmes (24.7% and 22.2% respectively) when compared to the average of 17.4% of graduates who followed a vocational further education. A total of 162 out of 236 graduates (68.6% of the total) are those who followed an academic education all the way. 37 graduates are those who had a vocational education in both further and higher education constituting 15.6% of the total. As for those

who completed an academic post-secondary education and then changed to vocational for higher levels, these form 16.5% of the graduates with academic post-secondary education (32 out of the 194). However, only 5 graduates, which form 11.9% of those who had a vocational further education, then pursued an academic higher education.

This suggests that the system has limited flexibility for movement between academic and vocational pathways, particularly from vocational further education to academic higher education. This might be partly explained by strict entry requirements for academic institutions which make it more difficult for students with vocational backgrounds to access higher academic programmes. On the other hand, it also suggests that the majority of those students, who chose vocational further education, continue on this pathway into higher education. Besides this, a considerable share of students, who completed academically oriented further education, choose to continue their studies at higher education level in vocationally oriented programmes.

Mode of attendance

Among all the graduates, 91.8% followed their programme on campus, 6.1% of them through blended learning, and 2.1% through distance learning. Private institutions are more flexible in terms of the mode of attendance with only 69.6% of their

¹¹ Cedefop, Permeable education and training systems: reducing barriers and increasing opportunity. Briefing note November 2012

Figure 4: Mode of attendance by gender, qualification level, status and type of institution

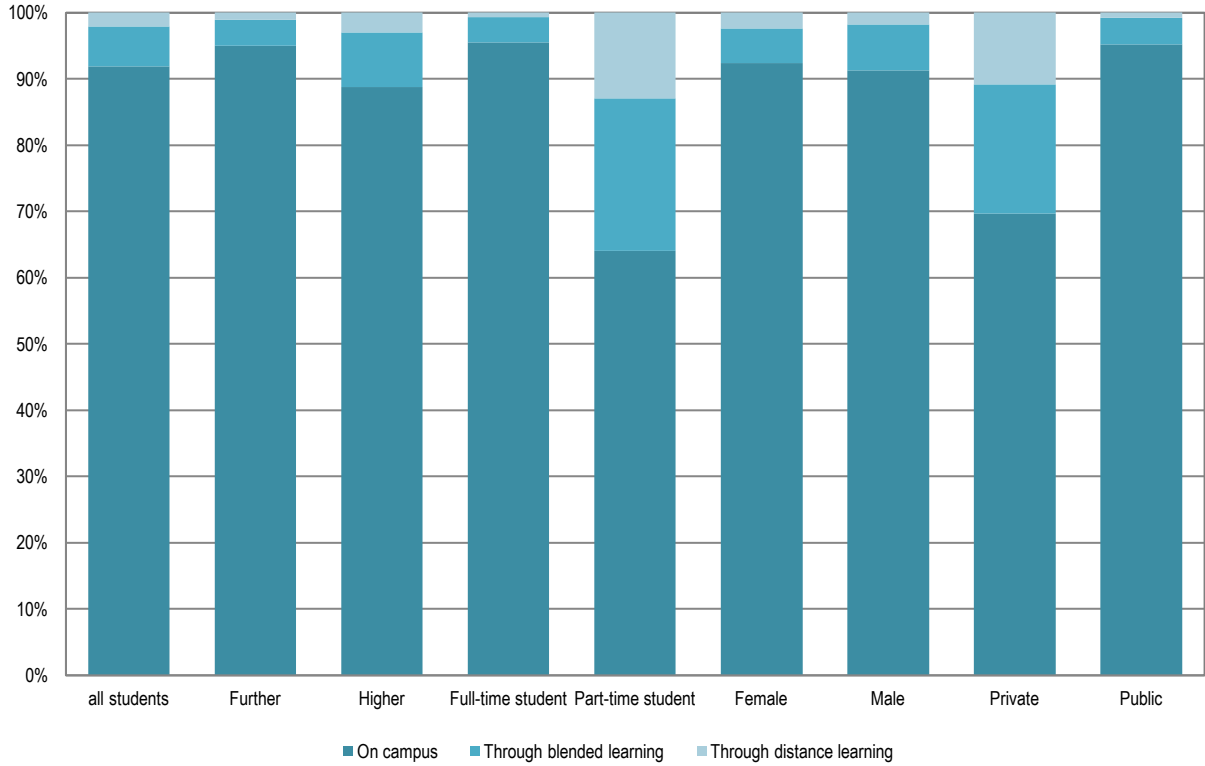
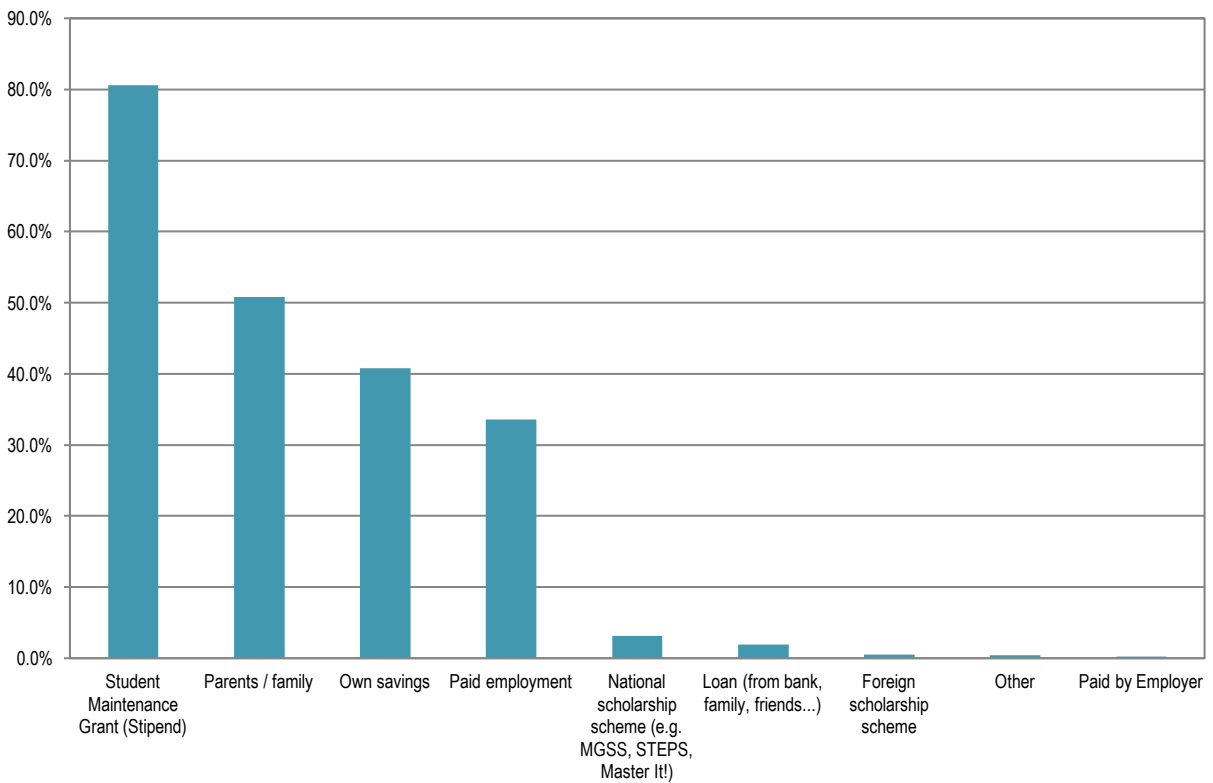


Figure 5: Funding sources of qualification attained in 2013/2014 for all graduates



graduates reporting to have followed their programme on campus. Similarly, graduates, who followed their programme on part-time basis, report more often to have followed their programme through blended (23.1%) or distance learning (12.9%), while only 64.0% undertook their studies on campus. This emphasis on flexible modes of learning by private providers and in part-time programmes may explain their high take-up among more mature students with the average age of graduates from private providers being 27.61 years and of part-time students 36.19 years, since these have to reconcile their studies more often with work or family responsibilities.

2.2. Funding of studies completed in 2013/2014

The funding sources most frequently mentioned by graduates are stipend/student maintenance grants (80.6%), parents and family (50.8%), own savings (40.8%), and paid employment (33.6%). Students in Malta seemed to rely considerably less on loans, sponsorship from employers or foreign scholarships.

National scholarship schemes were also mentioned as a source of financial support by 3.1% of graduates, more frequently by part-time students (11.4%), graduates from private higher education institutions (11.9%), and those in the fields of science, mathematics and computing (13.5%).

The stipend or the Student Maintenance Grant forms a source of financial support for more than 90% of full time students, for around 95% of those in general education, for 86.0% of those in public institutions and for 91.5% of the Gozitan graduates. These high shares can be explained by the conditions for students to receive such financial support which targets these particular student groups.

When comparing graduates with particular characteristics. A higher share of graduates from academic institutions depended on parents and family than their

counterparts in vocational institutions (53.3% of academic graduates and 44.9% of vocational) whereas higher shares of those from vocational relied on paid employment (42% of them compared to 30.6% of those in academic education). As expected, due to the age difference, almost 43.8% of graduates from higher education mentioned paid employment as a funding source compared to 23.1% of those from further education levels.

Graduates with a higher education background seem to be more often supported by their family and parents since 57.6% of them mentioned it compared to 49.7% of those without higher education background. Those with higher education background are younger on average which means they need more parental financial support but also this might be explained by the possibility that parents with higher education backgrounds might be more willing and able to support their children's academic endeavours.

Larger differences are observed between full time and part-time graduates where only 2% of those who followed their study programmes part-time mentioned parental financial support when compared to 57% of those in full time studies. Furthermore, 60% of part-timers relied on paid employment and this is twice the share of full timers who relied on their employment. No such difference is observed between any other groups. This seems to be linked again to the age differences between full-time and part-time students. Older graduates, therefore, seem to rely more often on paid jobs to support themselves financially or may have started their programme of studies after taking up employment. On the other hand, the possibility to undertake studies part-time might also encourage financial independence during studies. Considering the age factor, where part-timers are older on average, and the heavy reliance on paid jobs, a lower study-related workload and more flexible provision of study programmes seem to be in demand among older students.

2.3. Activities undertaken during studies completed in 2013/2014

Work placements

When asked about work placements undergone during their studies, almost 54% did not have any work placements during their studies, 22.3% of them had a compulsory work placement, and 23.8% had a voluntary work placement. Graduates from academic, full time, general education, and with higher education background had higher shares of voluntary work placements. These turned out to be mainly Sixth form students who were encouraged by their institutions to engage in projects such as Young Enterprise for example. As for the compulsory work placements of this group of graduates, these might be community work that forms a part of some courses such as the Systems of Knowledge.

It is noticed that for the fields that have high shares of students who participated in work placements, such as the fields of education, social sciences, business and law, health and welfare and services, a work placement is incorporated in the programme as a requirement to complete studies.

Part-time students were the least likely to participate in any work placements during their studies (78.3% of them did not). Many of these students would be already working and the experience they would be gaining on the labour market makes up for the absence of work placements during studies.

Participation in student representation

There are 65.9% of graduates who were not involved in any student representation during their studies. There is no major difference between those in academic or vocational institutions. Graduates from public institutions were slightly more likely to be involved in student representation. Interestingly, graduates from Gozo seem to be more involved in student representation than graduates from other regions. 46.3% of students from Gozo are active in student representation. The specific needs of students from this region, especially those

having relocated to Malta to undertake their studies, might explain the high involvement of Gozitan student. Indeed, this is evidenced by the existence of a Gozo University Group catering specifically to the representation of the interests and needs of students from Gozo.

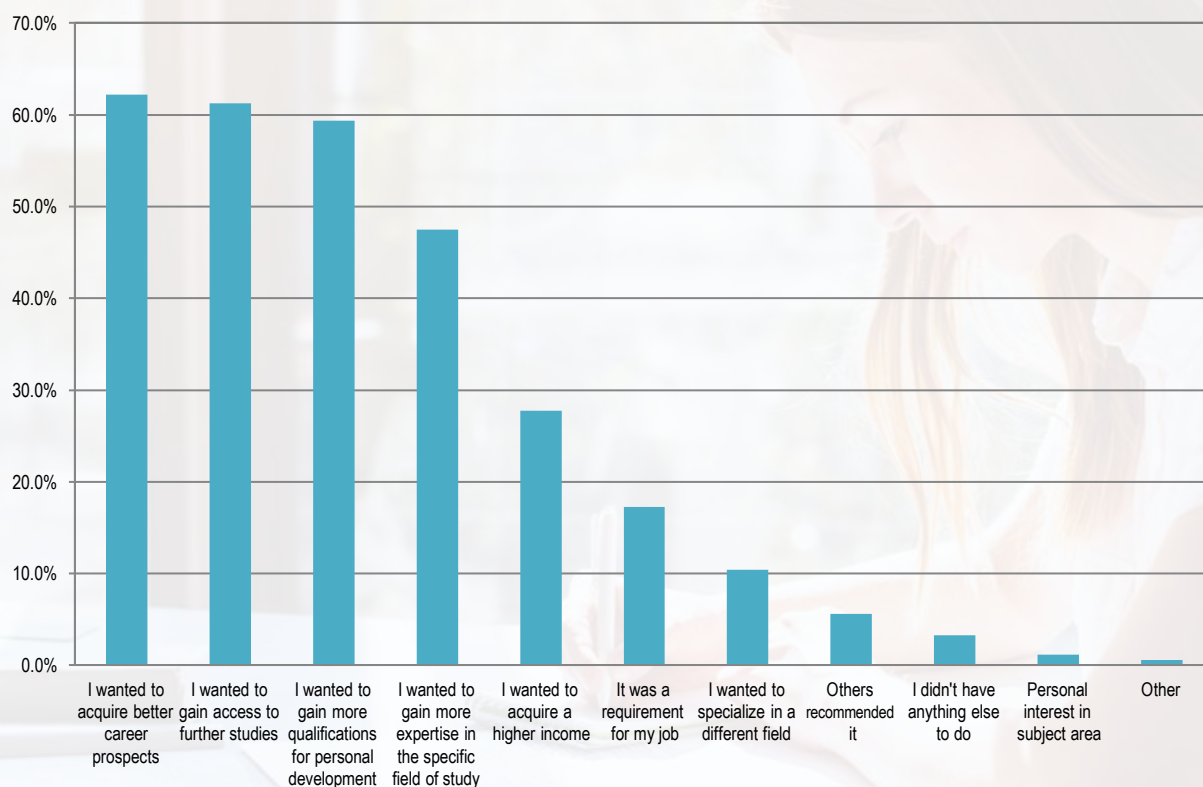
A considerable difference can be noted in the involvement in student representation between graduates from further and higher Education and graduates from full-time and part-time programmes. Full time students (36.3%) as well as further education students (39.2%) were more often involved in student representation during their studies than part-time students (16.8%) and graduates from higher Education (29.2%). This may be linked to graduates from higher Education and part-timers being older and having more commitments besides their studies. Moreover, full-time and further Education students have been found earlier in this report to have more often followed their courses on campus which facilitates their involvement in extracurricular activities.

2.4. Reasons for undertaking the studies completed in 2013/2014

Understanding the reasons why graduates undertake their studies sheds more light on their personal views and assessments of their study programme.

In general, the reasons most frequently mentioned by graduates for undertaking their studies are acquiring better career prospects (62.2% of the total), gaining access to further studies (61.2%), gaining more qualifications for personal development (59.4%), gaining more expertise in a particular field (47.5%) and acquiring a higher income (27.7%). Younger graduates mention more often the wish to gain access to further studies and better career prospects. The graduates from the older age groups (over 24) seemed to be more driven by personal development, career prospects and the need to gain more expertise in a specific field of study.

Figure 6: Reasons for undertaking the studies for the qualification attained in 2013/2014 for all graduates



Thus, while the younger graduates perceive education as a means to access further studies and eventually find employment, the older ones perceive their education as a way to improve their career status or to specialize in a specific subject area by going for higher level degrees.

When analyzing reasons chosen by study related and socio-economic characteristics, graduates from academic programmes mentioned more often that they wanted to gain access to further studies (65.3% of them) than acquire better career prospects (60.5% of them). However, those in vocational programmes seemed to give more priority to their career as mentioned by 66.8% of them, rather than to furthering studies (only mentioned by 50.4%). The answers given by level of qualification and status of studies (full-time or part-time) reflects the corresponding answers of the age groups that they represent since further education

and full time studies have younger graduates than higher education and part-time studies.

Graduates from each of the fields of studies, with the exception of general education, chose personal development, expertise in field of study and career prospects as the three most common reasons to undertake their studies. In addition to these three reasons, 39% of graduates in engineering, manufacturing and construction mentioned that they wanted to acquire higher income. This share is the highest for this statement among all other groups. Furthermore, 33.6% of those in education mentioned that their studies were a requirement for their job. This share was the largest for this reason among all other groups.

Males more often than females stated that a reason for their studies is to acquire higher incomes (34.3% of them compared to 22.2% of females).

This may be the result of gender stereotyping, which generally considers males as the main breadwinners in Maltese homes, which may explain their wish to get a higher income. No particular difference has been observed in terms of public/private institution or by higher education background.

2.5. Retrospective assessment of studies completed in 2013/2014

Graduates were asked to retrospectively assess their education experience. They were asked whether they would choose the same institution and whether they would choose the same study programmes they completed in 2013/2014. Most graduates (86.4%) would have chosen the same study programme and 83.4% the same institution. This suggests a general overall satisfaction of graduates with their programme of studies and institution attended.

Graduates from academic programmes appear to assess their programme and institution more positively than vocational graduates. Similarly, part-time graduates have more often responded positively than full-time graduates. 94.6% of part-time graduates would have chosen the same study programme and almost 92% of them would have chosen the same institution. On the other hand, 85.3% of full-timers would have chosen the same programme and 82.3% of them would have chosen the same institution.

Among graduates from all fields, those from the social sciences, business and law assessed most positively both their programme and their institutions. Education graduates seemed very pleased with the institution attended with 100% of them who responded they would have chosen the same institution, while judging their programme slightly less positively with 85.5% stating that they would have chosen it again. Conversely, 95% of graduates from health and welfare graduates were satisfied with the study programme but only 77.7% of them were satisfied with the institution attended. Responses across home districts seemed similar in terms of choosing the same studies and the same institution with the exception of the graduates from Gozo, who

were much less pleased with the institution attended (31.4% would not have chosen the same institution). This is the result of the limited choice Gozitan students have especially if they initially preferred not to move out of Gozo for their studies.

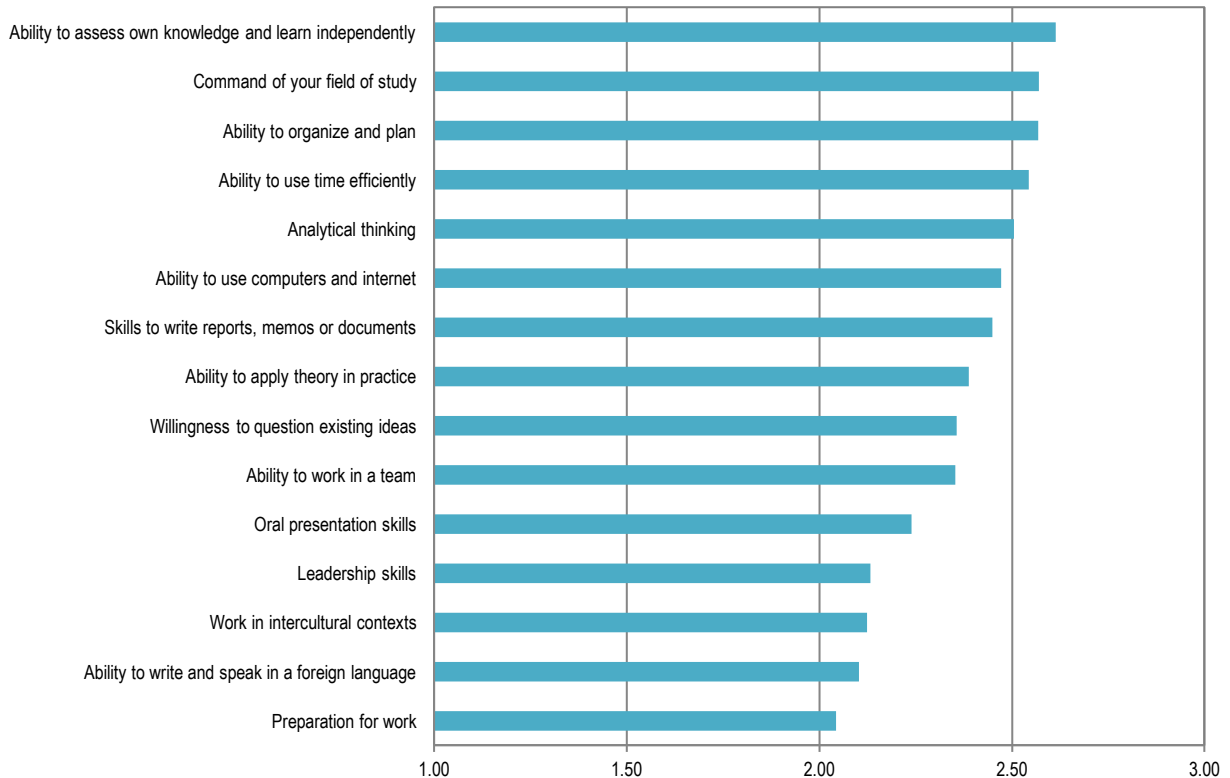
Finally, one of the most striking differences observed is between graduates from public institutions and those from private institutions. A higher share of graduates from private providers would have chosen both the same study programme (93.3%) and the same institution (90.8%) when compared to the corresponding responses of graduates from public institutions (85.4% would have chosen the same studies and 82.3% the same institution). This might be linked to the higher flexibility of programmes offered by private providers or the smaller sizes of these institutions, which may allow for more personalised attention. These factors possibly might account for the higher levels of satisfaction of graduates from these institutions. Another explanation might be that private institutions tend to instil more pride and sense of belonging in their students who consequently feel more satisfied with their institution.

2.6. Assessment of skills acquired during studies

Graduates were asked to retrospectively assess the skills they acquired during their studies and rate a list of skills with regard to the extent they have been acquired as Not at all (1), Some (2), Fully (3) and not applicable. Cases of a specific skill attainment being reported as not applicable were coded as 0 and treated as missing response in the analysis of that specific skill.

The skills listed included intercultural skills (foreign language proficiency and work in intercultural context), technical skills (such as the use of computers, command of field of study, presentation skills, writing skills), managerial skills (team work, leadership, organization skills, time management skills Jobsplus), learning and thinking skills, and the extent of preparation for employment.

Figure 7: Assessment of skills acquired during the studies for the qualification attained in 2013/2014 for all graduates (1 - not at all; 3 - fully)



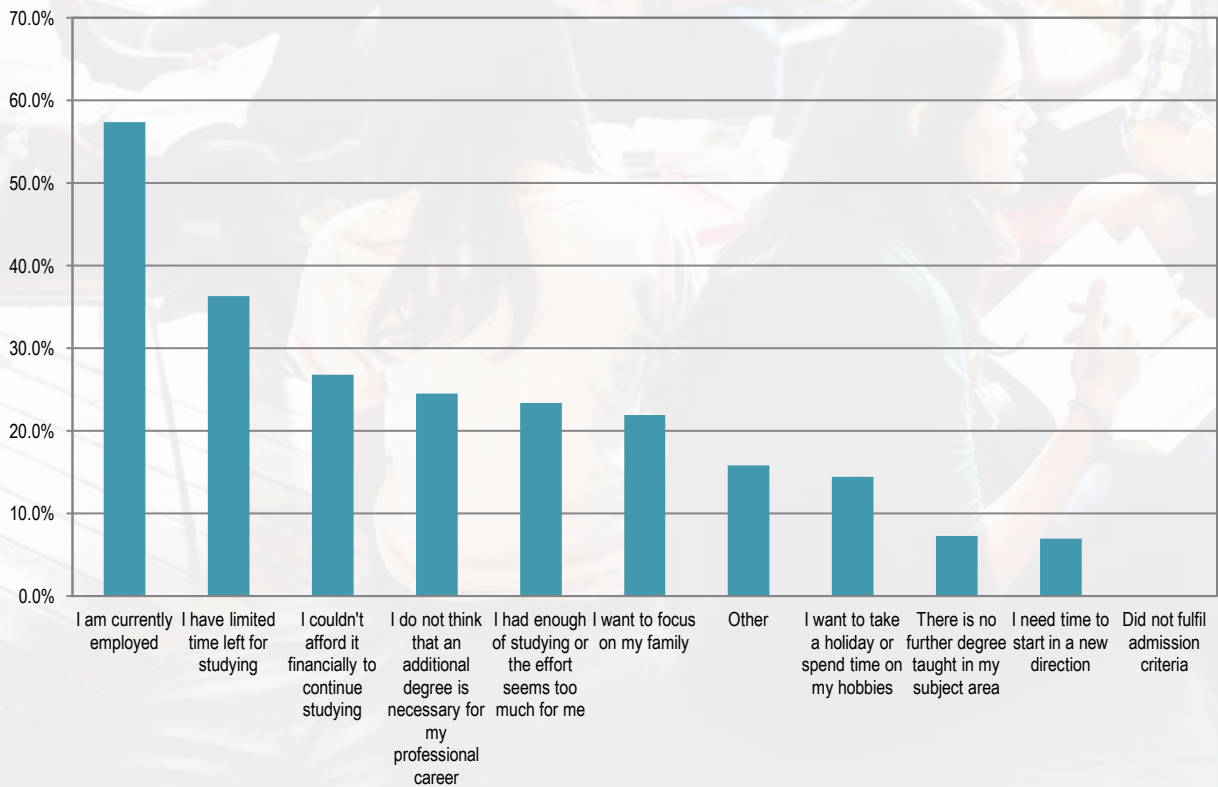
In general, graduates rated most positively: the extent to which they learned how to organize and plan, their command of their field of study, and their ability to assess own knowledge and learn independently. Older graduates rated most skills more positively than the younger ones. The youngest group rated the leadership skills, the oral presentation skills and their preparation for work particularly low. However, their command of their field of study as well as their ability to learn independently was acquired to a higher extent among this age group.

However, the skills rated most negatively are the intercultural skills as well as the preparation for work. It might be that Maltese students, for whom both English and Maltese are official languages, rate poorly the ability to write and speak in a foreign language. This low rating of intercultural competences among graduates is in contrast

with the reality of Maltese society, which is intercultural both in terms of language abilities, intercultural links and exposure. Graduates might be comparing their classroom experience to their everyday life and having the impression that no particular effort is invested to highlight the intercultural exposure. They tended to rate this aspect lower than others.

When linking the assessment of the skills attained with the reasons stated by graduates for undertaking their studies, the relatively high rating given to the command of the field of study as one of the most frequently mentioned reasons for studying, shows that the study programme was perceived to have fulfilled its purpose at this level. However, the low rating for the preparation for work comes against the other most commonly mentioned reason for undertaking studies, which is to acquire better career prospects.

Figure 8: Reasons for not furthering studies after completion of the qualification attained in 2013/2014 for all graduates



This calls institutions to reconsider this study-employment relationship and integrate ways such as work placements and internships to better link studies to jobs. However, one needs to keep in mind that many graduates, especially those in arts and humanities, might not appreciate enough the utility of their acquired skills (unlike those studying natural sciences or engineering). It does not necessarily mean that they do not have work-relevant skills but might need to start their employment in order to discover those acquired 'invisible' skills. Besides, there is also another important point – that many courses are not vocational in nature – thus, they are not meant to be directly work-related. They impart knowledge and skills that might

be used in different settings. Besides, subjects at Sixth Form level are in their nature not meant to prepare students directly for work.

Vocational students and those without higher education backgrounds seemed to be more pleased with their study programmes as they rated the different skills more positively. Females gave more positive rating when compared to their male counterparts. No particular difference is observed between public and private institutions' graduates or across home districts. Graduates from higher education were also more positive regarding the skills acquired, which suggests that studies at a lower level tend to focus on academic development of the students rather than on acquiring additional skills.



Graduates from higher education were also more positive regarding the skills acquired, which suggests that studies at a lower level tend to focus on academic development of the students rather than on acquiring additional skills

Further education graduates had rated the command of their field of studies highest among all others which gives a clear indication of the main focus of the education they experienced. They have also invested more economically in their studies since they often have to fund their own studies. Besides, they might have also chosen their education programme more carefully, and so they are more satisfied with their outcome.

When comparing responses of part-time graduates and full-time graduates, it was found that the former had more positive responses than the latter. The difference in the age distribution between both, where older graduates have studied part-time,

might explain the more positive rating of part-timers. Indeed, part-timers rated nearly all skills higher than graduates of full-time programmes, notably the ability to apply theory in practice, their preparation for work, analytical skills, and their command of their fields of study. Part-time students, who most probably are working alongside their studies, may judge their studies more positively, since they might have had the opportunity to apply their studies in practice.

When comparing the ratings by fields of study, no particular differences could be noted. One striking observation could be made regarding the preparation for work. It could be noticed that the fields which

had the highest ratings for the extent that their studies had prepared them for work (education, services and health and welfare), are also the ones with the highest shares of graduates who had work placements during their studies. And the fields with the lower ratings (humanities and arts, engineering, manufacturing and construction, and sciences, mathematics and computing) are also those with the lowest shares of graduates with work placements. This, again, can serve as evidence to the importance of exposure to the world of work and employment during studies.

2.7. Further studies after completion of the qualification in 2013/2014

Those graduates, who did not continue their studies after completion of their qualification obtained in 2013/2014, were asked whether they had plans to continue their studies. Out of all those asked, 76% of them replied that they had plans to continue their studies. Although not statistically significant (Pearson Chi Square 0.078), the youngest group of graduates were most likely to continue their studies (81.8% of them) whereas only 64% of those above 27 years of age had plans for further studies. Graduates, who followed their studies full-time, with a higher education background, from public institutions and from the Northern and Western regions, planned more often to further their studies.

Graduates were asked whether they had continued their studies after completion of their 2013-2014 qualification. Out of all graduates, 66.7% were enrolled in further studies at the time of taking the survey. It is interesting to note that a similar pattern is visible with regard to the groups of graduates who continued their studies compared to those who did not but were planning to do so in the future. Graduates, who followed their studies full-time, with a higher education background or graduates from public institutions are more often continuing their studies. Most of the graduates from academic

programmes (74%) and only 47% of those from vocational programmes were engaged in further studies at the time of the survey. For graduates at lower levels, the academic graduates are those from Sixth Forms preparing students for entry into Higher Education. It is, therefore, expected that most of these graduates would proceed to further studies. Moreover, given that vocational programmes are only available up to MQF level 6, this might explain why more graduates from academic programmes choose to continue their studies at higher levels. The majority of graduates who followed their qualification on a full-time basis are currently undertaking further studies (70.6%), while only 37% of those who were part-time students are enrolled in further studies. The former are on average younger and would have wanted to pursue higher degrees. As for the latter, these might have limited time for studies and find it harder to continue or they may have attained the level of qualification they aspired to.

Those graduates who were not enrolled in any further study programme and who mentioned that they had no plans for furthering their studies were asked about the reasons for their choice. The reasons most commonly selected were current employment, time limitations, and financial constraints. On the other hand, none of them answered that they did not fulfil the admissions criteria, suggesting that they would be eligible to continue their studies. This can play a major role in encouraging further studies. Only 7.3% of the respondents considered that there is no further degrees taught in their subject area which indicates that students in Malta have ample and diverse choice of study programmes available for them. It is important to note, however, that when graduates are not interested in furthering their studies due to the most important reasons stated, they might not be fully aware whether or not there are other relevant study programmes for them in Malta or whether they are eligible for further studies.

CHAPTER 3

MOBILITY

3.1. Mobility during studies

Graduates were asked whether they had any short term mobility experience abroad during their study programme. Almost 85% of them had had no period abroad for the qualification they completed in 2013/2014. The share of graduates, who went abroad, seems to increase with older age groups. Moreover, graduates from higher Education reported higher shares of study mobility (18.7%) than the graduates from further Education (11.5%).

Graduates with higher education backgrounds also reported higher shares of study mobility with 20.6% of having been abroad during their studies, compared to only 12.2% of those who have no higher education backgrounds. Parents with higher education might have been more often abroad for study or work related issues themselves and might be more open to encourage or support such study mobility.

As for the difference between the fields of study, education has the lowest share of graduates who had been abroad (7.1%) while graduates from health and welfare (44%) and services (65.2%) report the highest shares. This may be linked to compulsory international internships among students from the Institute of Tourism Studies, who are undertaking studies in the field of Services. Interestingly, graduates from the field of education had rated their intercultural skills most negatively whereas those from services and health and welfare rated them much higher.

Those who had been abroad during their studies were asked for the purpose of their stay. The highest share of them (32.4%) were abroad for an internship or a work placement, 23.9% of them for a conference, and 17.2% of them for a whole semester abroad.

3.2. Mobility after studies

Apart from mobility during the studies completed in 2013/2014, the research also looked into the mobility of graduates following completion of their qualification, whether to further their studies or for work.

With regard to the mobility of graduates for further studies, out of all those graduates, who continued their studies after completion of their qualification in 2013/2014, 8.9% are currently undertaking their studies abroad. Studies undertaken abroad are more common among graduates, who are currently pursuing higher education qualifications (20.0%) compared to those, who are undertaking further education (2.9%). Indeed, a statistically significant difference may be noted for the place of study by level of qualification currently pursued by graduates, who continued their studies (Pearson Chi-Square 0.000). This suggests that studies abroad are more frequent among those graduates currently pursuing a Masters (20.9%) or Doctorate (58.3%). It can also be noted that a higher share of graduates with a higher education background (14.3%) compared to those without higher education backgrounds (3.7%) pursue their further studies abroad. Several explanations can be provided for this situation. Graduates without higher education are on average older and might have already their own families or work responsibilities in Malta, which makes it more difficult to go abroad.

Table 5: Country of residence by current employment status of graduates

	RESIDING ABROAD		RESIDING IN MALTA		TOTAL	
	Headcounts	%	Headcounts	%	Headcounts	%
I AM AN EMPLOYEE	18	36.0%	434	59.4%	452	57.9%
I AM NOT ENGAGED IN ANY EMPLOYMENT	31	62.0%	278	38.0%	309	39.6%
I AM SELF-EMPLOYED/ AN EMPLOYER	1	2.0%	14	1.9%	15	1.9%
I AM UNDER WORK CONTRACT BUT CURRENTLY ON LEAVE (MATERNITY, SABBATICAL, SICK LEAVE, ...)	0		5	0.7%	5	0.6%
ALL STUDENTS	50	100.0%	731	100.0%	781	100.0%

Moreover, those with parents who have higher education might get more parental support and encouragement to pursue higher qualifications and their families might be more aware of the value mobility adds to their study experience.

Additional analysis was done to understand the purpose for mobility after completion of studies. Out of the total 50 graduates residing abroad, 38.0% of them were engaged in employment which is a total of 20 graduates. A total of 36 graduates (62.0%) residing abroad mentioned that they were enrolled in certain study programmes. The data suggests that there are statistically significant differences in the current employment status of graduates depending on their current place of residence in Malta or abroad (Pearson Chi-Square 0.009). Indeed, the opposite trend to what was observed for graduates residing abroad, namely that the majority of them are undertaking studies rather than being engaged in employment, can be witnessed for graduates living in Malta. Most of them are working (61.3%), while only 38.0% are undertaking further studies.

Graduates who are continuing their studies abroad (36 out of 50) do so most often in the United Kingdom (36.4%); Malta (27.4%); the Netherlands (12.8%); Italy (4.9%) and Australia (3.8%). Indeed, 10 out of these 36 graduates, who are residing abroad and continuing their studies, are enrolled at an institution in Malta probably following a study programme by distance learning. These most probably went abroad either for employment or following a family member. They might have decided to continue their studies in Malta either because they can more easily access further study programmes or because it was more affordable financially when compared to their country of residence.

In comparison, graduates living and working abroad (20 out of 50), reside most often in the United Kingdom (45.8%); Belgium (9.9%); Germany (9.3%); Australia (6.9%) or Denmark (5.0%). This data also indicates that, 6 out of 50 graduates are residing abroad and are studying and working at the same time. In terms of percentages, 60% of graduates abroad are continuing their studies only, 12% are both studying and working, and 28% are in employment only.

CHAPTER 4

EMPLOYMENT

The level of education is a good indicator of the employability and transition to employment, and while it is believed that, to a certain extent, there is a causal link between both, it is worth mentioning that the education type, level and duration are not the only factors affecting the individual's career success.

The first area of concern is the extent of compatibility between the graduate's education and their employment. One can differentiate between horizontal mismatch characterized by individuals who are working in their own level of education but within a different field, or vertical mismatch, which indicates employment that does not match the level of the qualification within the same field of study.¹²

One can differentiate between formal and real mismatch¹³. The formal mismatch depends on the formal certified knowledge which can be captured by comparing the formal status of the qualification obtained to the formal occupation and sector of employment. The real mismatch is related to the actual use of the skills acquired during studies. This study attempts to capture the real mismatch by asking for the graduates' personal evaluation of the relationship between their studies and employment.

While formal qualifications remain a strong indicator for the employer about the capabilities of the potential employees, and while education can play a major role in developing the skills and knowledge needed to perform better in employment,

there are a number of non-education factors which also play a major role. These are *personal traits* such as one's personality and career aspirations; the *context of origin of the individual* such as the socio-economic background, work history, and parental education background; the *influence of society and culture* such as gender, ethnicity, overall demographics characteristics as well as cultural beliefs which might influence career choices; *the work related aspects* such as the external labour market demands; and finally *the global context* such as globalization and virtualisation which are shifting the nature of employment.¹⁴ For the purpose of this study, there was an attempt to collect as much data as possible on each of those aspects with the aim to form a complete picture of the graduate's situation.

The employment situation of graduates after they completed their qualification as well as the transition and relationship between studies and employment will be analyzed and discussed in this section. In addition to socioeconomic characteristics and study related characteristics, a set of work related characteristics is introduced in this chapter to analyze different questions by those new characteristics introduced previously in table 1.

12 Employability of Graduates and Higher Education Management Systems - Final Report of the DEHEMS project (2011) retrieved from http://www.aqu.cat/doc/doc_60722650_1.pdf

13 Green and Zhu (2010) as cited in Employability of Graduates and Higher Education Management Systems - Final Report of the DEHEMS project (2011).

14 Mayrhofer, W. Et al (2005)

4.1. Current employment

Current employment status

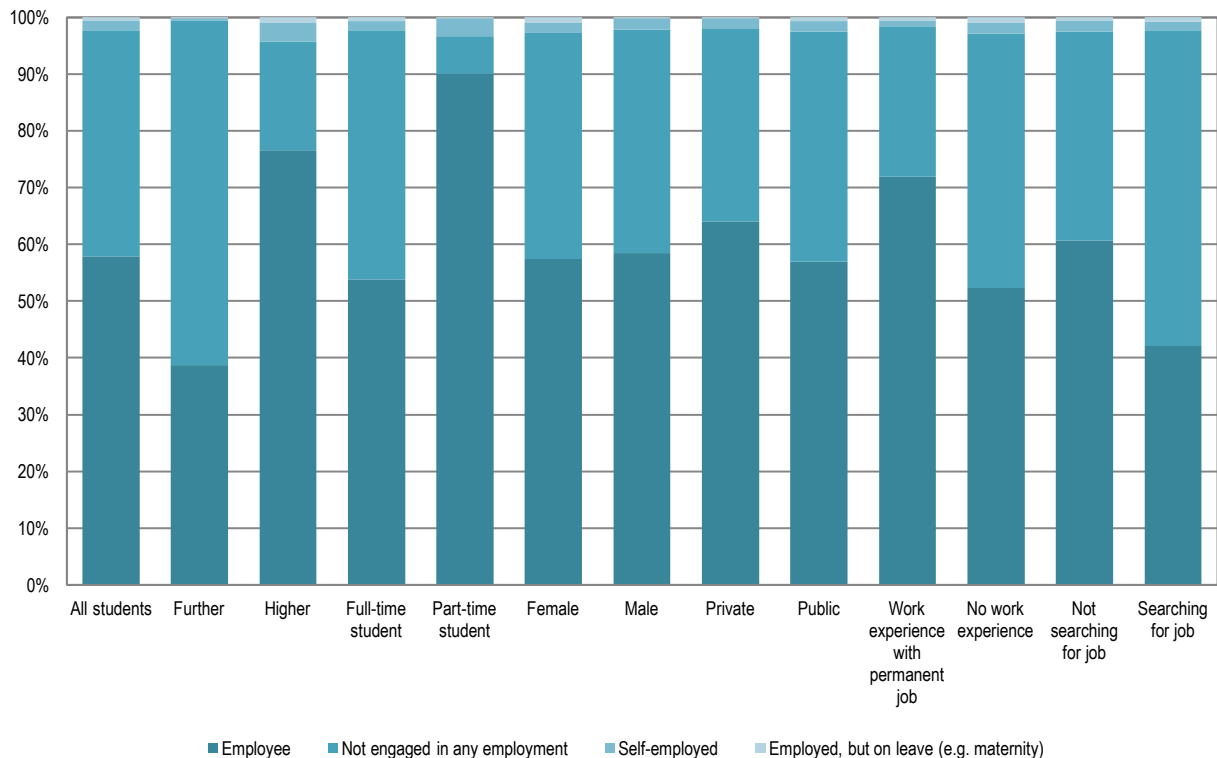
As had been indicated in the introduction section of this report, graduates are all individuals who completed their study programme successfully in the years 2013 and 2014 from MQF levels 1-7 from all licensed education providers in Malta as well as self-accrediting providers and Sixth Forms.

Graduates were asked about their current employment situation irrespective of whether they were employed before completion of studies or whether they found their current job after they finished their studies. It was found that 39.6% of all graduates were not engaged in any employment at the time of the survey, almost 58% were employed, 2% (15 graduates) were self-employed, and 5 graduates were under contract but on long leave at that time. Thus, a total of 60.4% of all graduates were in some form of employment.

Graduates from vocational education were more likely to be in some form of employment (80.6% of them) than those from academic education (52.8%). On the one hand, graduates

from academic institutions have been found to be more frequently engaged in further studies than those from the vocational institutions. The former were also more likely to have plans to continue their studies. On the other hand, vocational graduates have rated their preparation for work more positively than those from academic education, which suggests that vocational graduates find the transition to employment easier than other graduates. It is also noted that 80.9% of higher education graduates were in employment compared to 39.4% of the further education graduates. Higher education graduates are older on average. It is, therefore, plausible that they would have more often started their career as their general source of income. Further education graduates, most of whom are graduates from Sixth Forms, are more like to pursue higher degrees than enter the labour market after completing their post-secondary studies. Indeed, 90.7% of Further Education graduates continued their studies after completing their qualification in 2013/2014 compared to 43.4% of Higher Education graduates.

Figure 9: Current employment status for all graduates



A similar difference was observed between part-time graduates in employment (93.4% of them) and full-time graduates (56.2%). Part-timers would have possibly continued the job they had during their studies or, due to their work experience they had during their studies, could access other labour market opportunities more easily once they completed their studies.

Putting general education aside, most of whom are not engaged in any employment (67.5%) probably due to continuation of studies, graduates from education (100% of them), health and welfare (91.6% of them) and social sciences, business and law (83.6%) were more likely to be employed than their peers from the other fields of study.

Occupation held

When comparing the occupation held by graduates, who were employed at the time of taking the survey, some differences can be noticed by the different characteristics. Half of the employed graduates were found to be in managerial (9.9%) or professional (41.5%) occupations. Around 45% of them are technicians and associate professionals (10.7%), clerical support workers (17.9%) or services and sales workers (16.6%). Only 3.5% of the employed graduates are working at more elementary occupations.

Graduates from the academic branch were more likely to be managers and professionals (60.0%) than those from vocational education (36.4%). The latter, on the other hand are considerably more likely to be technicians and associate professionals or trade workers than the former. This might be the case due to vocational education's tendency to prepare students for particular types of occupations. Moreover, vocational education is offered predominantly at further education level and has limited higher level qualifications, which are generally needed for higher occupations.

52.7% of the employed graduates who followed their studies on a part-time basis are professionals compared to 39% of those from full-time study programmes. Full-timers

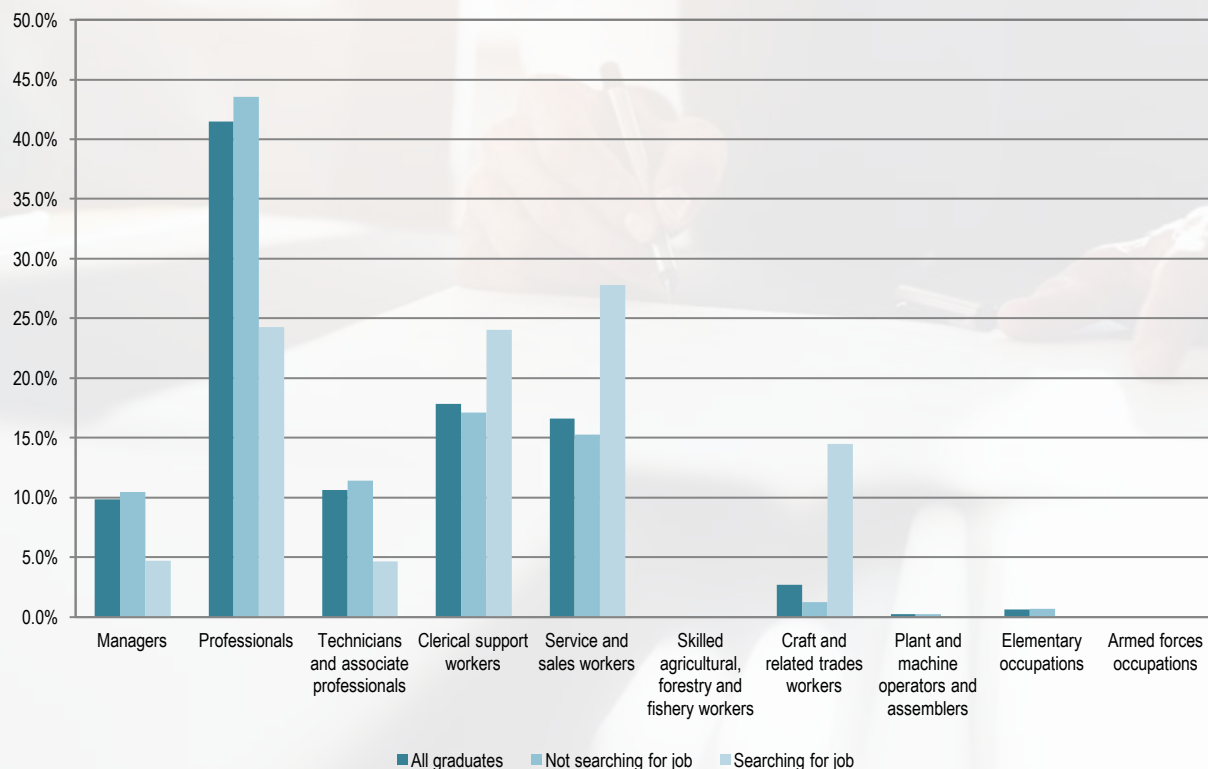
are more likely to be employed as clerical support workers (19.7%) and services and sales workers (19.6%). Full-time graduates had less permanent jobs during their studies and would still need to build their professional experience after they complete their studies. Part-time graduates had the possibility to advance in their employment during or before starting their studies and were thus more likely to have higher positions.

Graduates from social sciences, business and law are most likely to be in managerial positions (21.0%) whereas no graduates from the field of education are in such position. On the other hand, the highest shares of graduates among all other fields who are in professional level occupations are those from the field of education (71.9%).

When comparing female and male graduates of programmes from MQF level 1-7, males tend to have higher shares employed as technicians and associate professionals (14.4% of males and 7.5% of females), while females were more likely to be employed as clerical support workers (22.0% of females and 13.0% of males).

The vast majority of graduates who attended private institutions and are employed (74.7%) were found to be in managerial and professional positions whereas only 47.4% of graduates from public institutions were in such positions. Almost 19% of those in public institutions compared to 3.4% of those from private institutions were employed as service and sales workers. This may be linked to the higher average age of graduates from private providers (27.61 years) compared to their counterparts from public institutions (23.08 years), which might suggest that the former have more work experience that might be required for higher level positions. Moreover, given that graduates from these institutions followed their programme more often through distance or blended learning or on a part-time basis, it may have allowed them to retain and advance to their current position over time.

Figure 10: Occupation held in current employment by employed graduates who are searching or not searching for employment



Occupations held by graduates differed by employment related characteristics where those who had taken up their job before completion of studies were by far more likely to be managers (24.8%) than those who started their employment after graduation (5.1%). However, the latter group were more often employed as technicians and associate professionals, namely 13.2% of those starting their job after graduation compared to 5.6% of those having started their job before graduation. Since managerial positions most commonly require seniority in terms of professional experience, graduates who have been in their jobs for some time will be more likely to become managers than those who have recently taken up their job after completing their studies.

Those graduates who had previous employment experience including permanent jobs are more likely to be employed as

managers or professionals (56.8%), while those who had previous experience which does not include any permanent jobs are more often working as clerical support workers (24.0%) or service and sales workers (22.3%). As for those who had no previous employment experience, more than 50% of them are working as managers or professionals. More than half of those, who are managers, have started their employment before 2012 which means they have been in this job for a relatively long time. This explains why they have a relatively high share of them as managers in the absence of any other work experience.

As for graduates who are searching or not searching for jobs at the moment of answering the survey, a higher share of those who were not searching (54.1%) were in managerial and professional positions compared to the 29.1% of those who were searching for a job.

In contrast, those searching for a job are more often in lower level occupations as clerical support workers (24.1%) or service and sales workers (27.8%). This suggests that those graduates who were employed in lower level positions were less satisfied with their current jobs and were, therefore, looking for higher level or more permanent positions.

Sector of employment

When comparing the sector in which employed graduates are working (i.e. public or private sector), it was found that 66.2% of the graduates were employed in the private sector. There appear to be differences in the sector of employment of graduates depending on the field of study of their qualification. It was found that graduates from the fields of education (65.4%) and health and welfare (67.0%) had the highest shares in the public sector. These are most probably working in state schools, hospital and health centres run by the state. Since these two fields were also found to have the highest shares of females, this may explain why females have higher shares than males working in the public sector, namely 39.1% of females and 27.6% of males.

Out of all graduates from the Northern Harbour, only 19.7% are employed in the public sector. This is by far the lowest among all other graduates' home districts. Graduates from the Southern Harbour are those most likely to be in the public sector (47.8%).

As for the sector of employment by date of taking up the current job, it seems that those graduates who have taken their employment after completion of studies, were more likely to have joined the private sector, namely 68.0% compared to 60.7% of those, who were in jobs they had during their studies. Moreover, out of all graduates who were not searching for a job, 68.0% were in the private sector. On the hand, only 51.4% of those searching for a job were employed in the private sector. Bearing also in mind that those looking for a job were more often in lower level occupations compared to those not searching for a job, this might suggest that graduates aspire to attain higher level occupations and may be finding such opportunities in the private sector.

Status of employment

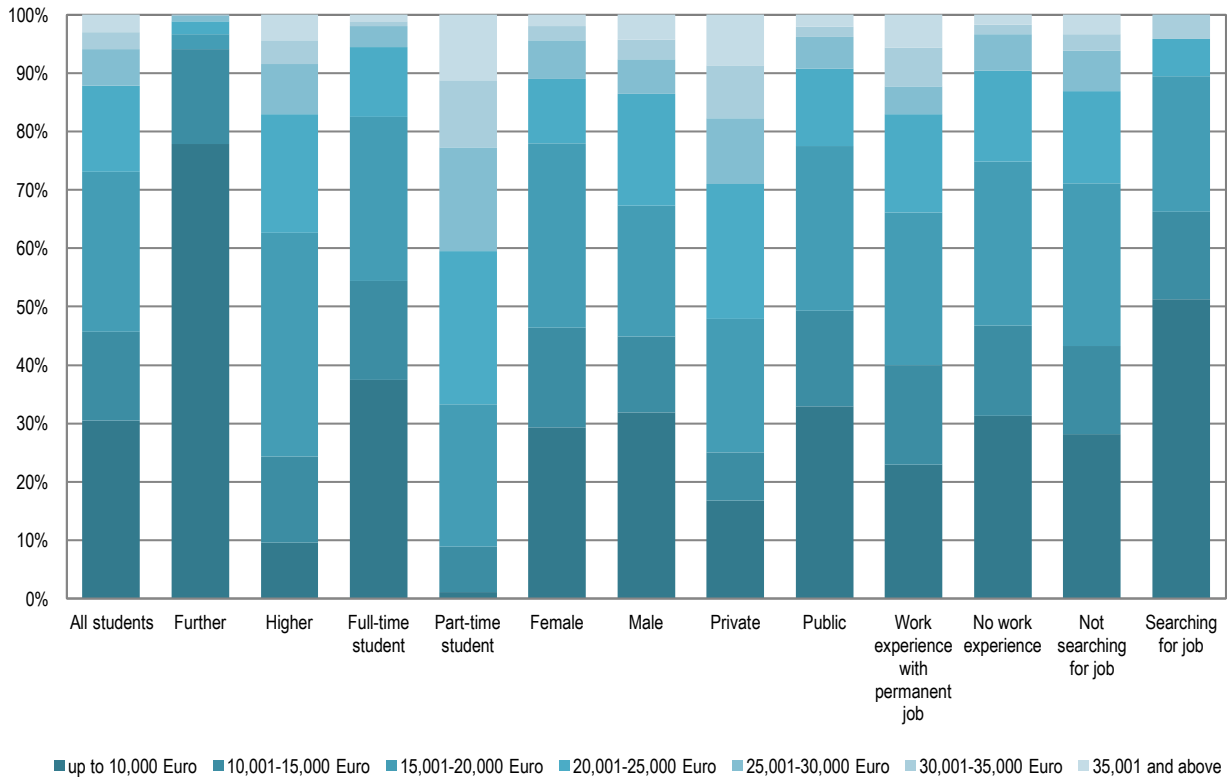
68.8% of all employed graduates were in full-time jobs and 27.2% of them were in part-time jobs. Graduates from higher education, who are employed, are more often in full time jobs (88.7%) compared to 25.5% of those from further education. Similarly, employed graduates who followed their studies full-time are less likely (62.6%) to be in full-time employment than those who followed their studies part-time (96.7%). This can be explained by graduates from lower levels, who studied more often on a full-time basis, since they have less professional experience and who would have more often plans to further their education instead of taking up employment. They appear, therefore, more likely to be in part-time casual jobs rather than in full-time permanent jobs.

Graduates from private institutions were also more likely to be in full-time jobs (79.9%) compared to their counterparts from public institutions (67.0%). These graduates are on average older students who were also more likely to have followed their studies part-time. This flexible delivery provided by private institutions appears to attract higher shares of graduates with permanent employment (48.0% of employed graduates from private providers held their job before completion of studies) and with more advanced positions.

Graduates who found a new job after completing their studies are slightly less often in full-time jobs (66.2%) compared to those, who had taken up their job before graduation (73.1%). Moreover, previous permanent experience played a role in being in a full-time job since those are more likely to be in full-time positions (76.9%) than those without previous work experience before taking up their current job (69.6%).

Finally, graduates not searching for employment are more often in full-time jobs (71.5%) compared to those searching for employment (46.9%). This suggests that being employed full-time is an important aspect for graduates' satisfaction, given that their peers in part-time jobs were more likely to be searching for employment despite being employed at the time of taking the survey.

Figure 11: Gross annual income from current main employment by graduates' characteristics



Gross Annual Income

Graduates were asked about their gross annual income from their current job. When comparing answers given by all respondents, 45.7% of them have an income of less than 15000 Euros per year. As for those graduates who earn more than 30000 Euros, these form a share of 5.9% of the total. The rest, notably 48.4% of the total, earn between 15000 and 30000 annually.

When comparing the income between the different characteristics, differences were consistent with the occupations held by different groups of graduates. In other words, those groups who were more likely to be in managerial and professional occupations were those that had the highest earnings.

4.2. Transition into employment

Time between completion of studies and taking up employment

When comparing the start dates of the current employments for the 472 graduates, who mentioned that they were employed,

almost 71% of them had started after completing their studies, 4% at the time of completion, and 25% of them had retained the job they had during their studies.

There appears to be a positive link between graduates' previous work experience and their current employment status given that 72% of graduates who had past work experience with at least one job for 12 months or more, 58% of those who had work experience but never had any jobs that lasted for more than a year, and 52.3% of those who had no labour market experience, were employed at the time of the survey. Non-permanent jobs typically included occasional or seasonal jobs that students have during their semester breaks.

These shares show that the labour market experience graduates have by the time they complete their studies considerably affects their likelihood of finding employment. Past experience does not only positively affect the likelihood of being employed but seems to also increase the likelihood of being in higher occupations and higher income positions.

This sheds light on the importance of exposing students to the employment environment during their studies either through flexible delivery to allow students to work during their studies, or through integrating internships and work placements in the study programmes.

A more detailed analysis of the comparison between the start date of current job and the date of completing studies is provided in relation to graduates who were in employment at the time of answering the survey. 30.4% of those who had academic studies mentioned that they kept the jobs they had during their studies whereas 85.4% of the vocational students got employed after they completed their studies or at the same time they completed. Most probably due to the age difference, higher education graduates, who were in employment, were found more likely to have retained their jobs they had during their studies (28.5% of them) than those in further education (17.5%). Further education graduates were younger and less likely to have permanent jobs but rather had seasonal and casual jobs which they would not retain after completion of studies.

Graduates who followed their studies full-time were considerably less likely to be employed in jobs which they had during their studies (15.5%) than those who followed their studies on part-time basis (68.9% of them), confirming that part-time students follow their programme of studies more often alongside employment.

Graduates from the fields of engineering and humanities and arts are those who most likely took up their jobs after or at the time of completion. These might have entered jobs that require a specific qualification and they could only access the labour market through their qualification.

There appears to be a difference in the start of employment between graduates of private and public institutions with 48% of employed graduates from private institutions having retained the jobs they had during their studies compared to only 21% of those from public institutions. One reason for this difference might be linked to the more flexible format of studies at private providers,

Figure 12: Mean duration between completing studies and starting employment for graduates who started employment after completing studies in months.

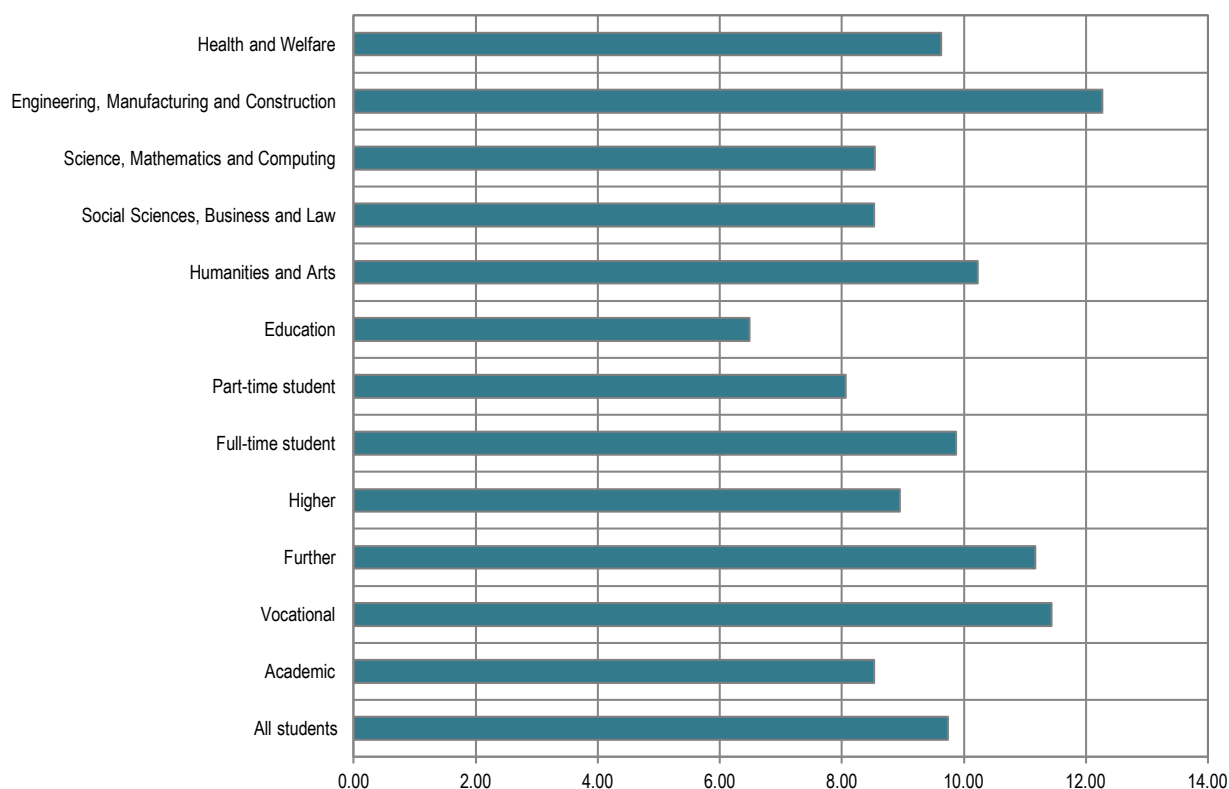
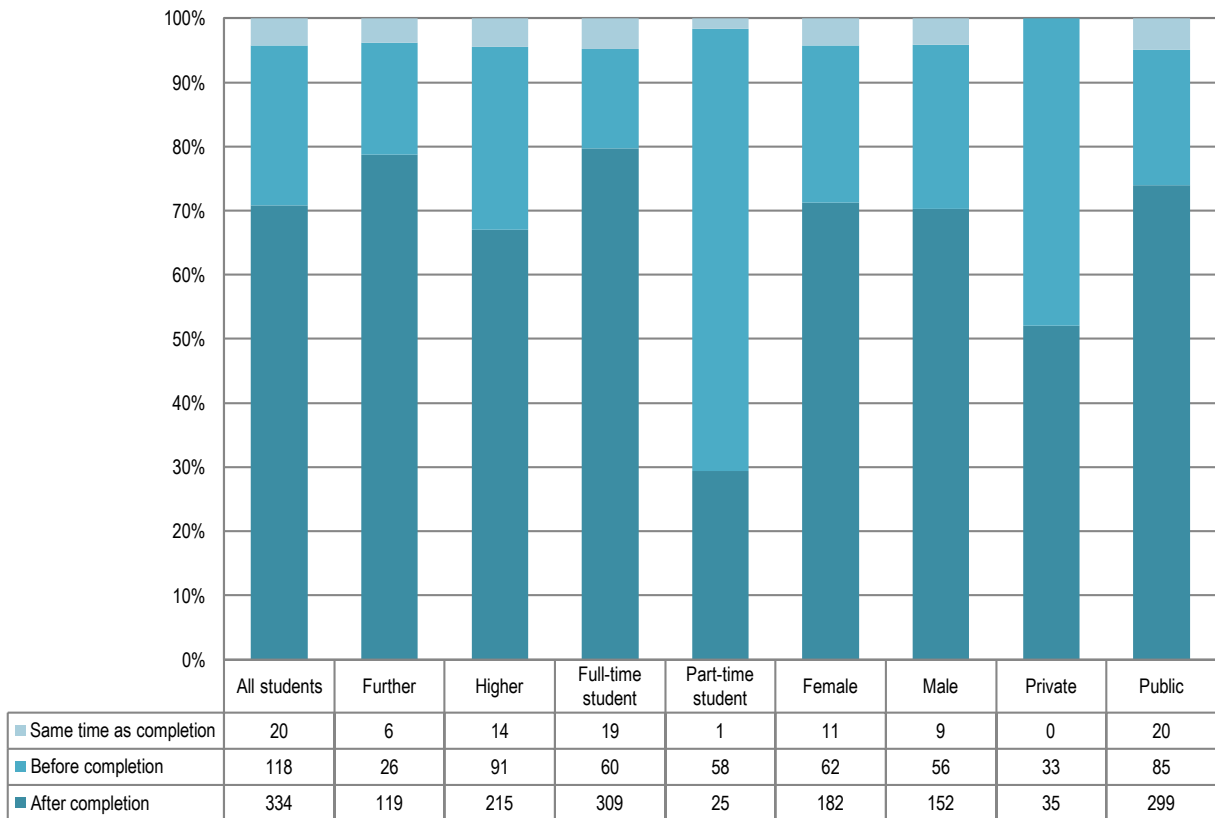


Figure 13: Start date of current employment compared to date of completion of studies by qualification level, status, gender and type of institution



since graduates from these institutions have followed their programme more often through distance (10.8%), blended learning (19.6%) or part-time (44.7%) compared to graduates from public institutions (4.0% studying through blended learning; 0.8% through distance learning and 6.5% part-time). It appears, therefore, that private education providers cater more to the needs of students with work or family commitments making it easier for them to continue their studies alongside employment. However, it might also be due to graduates from private institutions needing to work in order to fund their education and being, therefore, more likely to have permanent jobs during their studies.

Comparing similar data by work related characteristics; it seems that those who were in their first job during their studies were more likely to keep it after they complete

studies where 32% of those with no previous experience and who were employed at the time of the survey have retained their same job after their studies. For the older graduates, these have had this job position most likely for a long time even well before they started their study programme.

For the graduates, who were in employment at the time of the survey, the time between their completion of studies to finding their job was calculated.

Around 25.5% of them had their job before they completed their studies; 47% of them had found employment in the first 12 months after completion of studies and around 22% took between 1 and 2 years. The mean duration taken to find employment for all graduates, who started employment either directly upon or after they completed their studies was 9.74 months, irrespective of how actively they were searching for their employment.

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completed their studies



47%
had found employment
in the first 12 months
after completion of studies

Around **22%**
took between
1 and 2 years



Vocational graduates (11.44 months), those from further education levels (11.17 months), and those who followed their study programme on full-time basis (9.87 months) took on average longer to find their employment.

Graduates from engineering, manufacturing and construction took 12.27 months on average to find employment and those from education, who took 6.49 months, are the ones with the least time between completion of studies and start of new job.

Job search

All graduates were asked whether they were searching for employment irrespective of their employment situation. From all graduates, only 14.7% declared to be searching for employment. Almost 37% of those who are not searching for a job were not engaged in any employment. These are mostly graduates from lower education levels who wanted to further their education rather than be in employment. Only 10 graduates from all the respondents were inactive at the time of the survey in the sense that they were not enrolled in further studies, not engaged in any form of employment and not searching for employment.

Graduates from the academic branch were less often searching for a job (12.4%) than those from vocational programmes (21.3%). A considerable proportion of graduates from academic programmes are undertaking further studies (74.1% compared of 46.9% of graduates from vocational programmes) and are less often in employment (52.8% compared to 80.6% of graduates from vocational programmes). Being more often in education rather than in employment may explain why graduates from academic programmes are less likely to be searching for employment compared to their counterparts from vocational programmes. Moreover, bearing in mind that those graduates from academic programmes, who are in employment, are more often managers and professionals (60.0%) compared to graduates from vocational education (36.4%), might explain why a higher proportion of graduates from vocational education are searching for alternative employment as they may aspire to higher level positions.

Graduates who followed their education on full-time basis were also more likely to be searching for a job, namely 15.4% compared to 9.9% of graduates from part-time programmes, either because they were

Table 6: Graduates' employment status, further studies, and search for employment

HEADCOUNTS		NOT SEARCHING FOR JOB	SEARCHING FOR JOB	TOTAL
WORKING	Not studying	211	26	237
	Studying	206	24	230
NOT WORKING	Not studying	10	11	21
	Studying	236	52	288
TOTAL		663	113	776
%		Not searching for job	Searching for job	Total
WORKING	Not studying	27.2%	3.4%	30.5%
	Studying	26.5%	3.1%	29.6%
NOT WORKING	Not studying	1.3%	1.4%	2.7%
	Studying	30.4%	6.7%	37.1%
TOTAL		85.4%	14.6%	100.0%

not yet employed at the time of taking the survey (56.2% employed compared to 93.4% of graduates from part-time programmes) or because they are not as well established in their current position as their peers who have followed their programmes as part-timers in order to maintain their employment during their studies.

When analyzing the search for employment by the current employment situation, it was found, as expected, that graduates who were in employment who were less likely to be searching for employment than those who were not employed. However, the difference between both is minor. With 10.8% of those working and 20.7% of those not working searching for employment, the difference is barely ten percentage points. This may indicate that graduates, who are not employed, may have plans for further studies rather than employment.

Job search strategies

Graduates who were searching for employment were asked to select the strategies they used to search for their job. Graduates most often search for employment by visiting the internet sites of potential employers (75.4%), by replying to job advertisements in print media or on the internet (62.9%), by making spontaneous applications to businesses (53.1%) or through personal contacts (40%). Only 29.4% of them registered at Jobsplus and 29.2% of them used the services of a private recruitment agency.

When comparing the job search strategies of graduates from further and higher education both reported most often to have visited the internet sites of employers (84.8% of higher education graduates and 64.5% further education graduates) or replied to job advertisements in print media or on the internet (73.0% of higher education graduates and 51.0% further education graduates).

Figure 14: Strategies used by graduates to search for employment

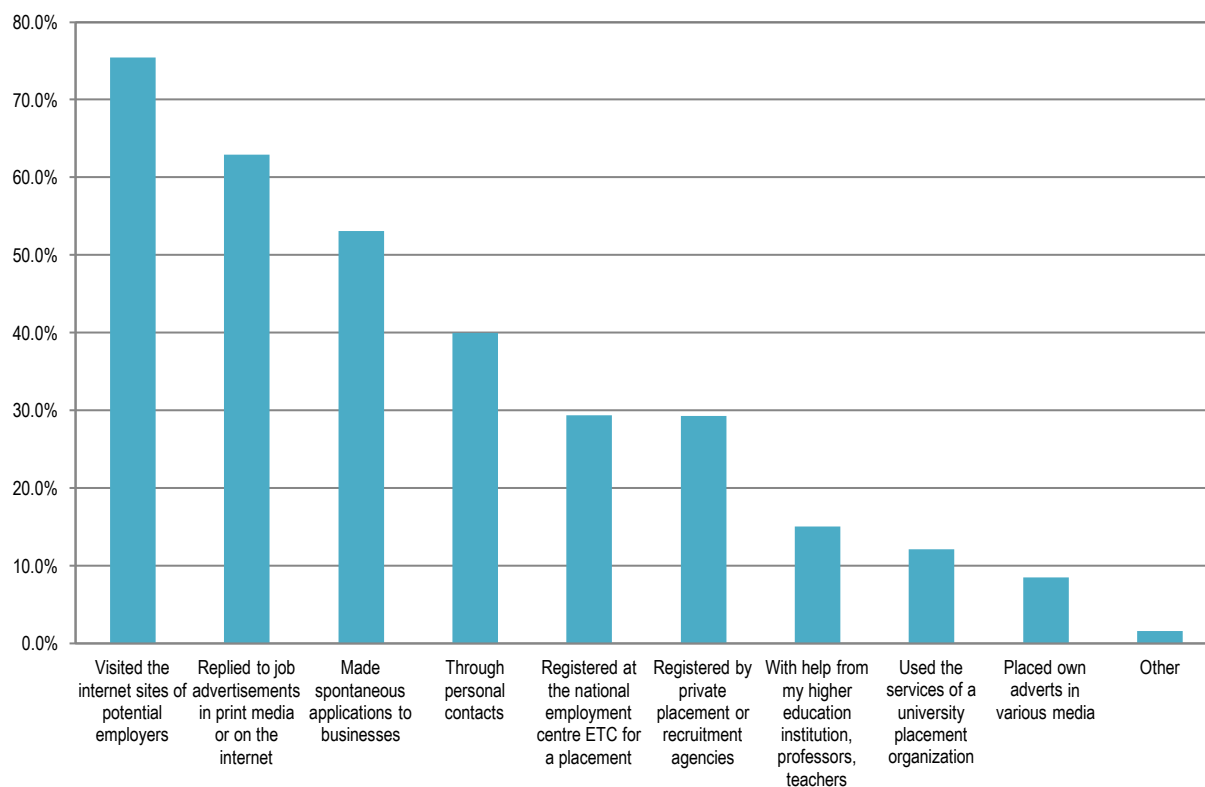
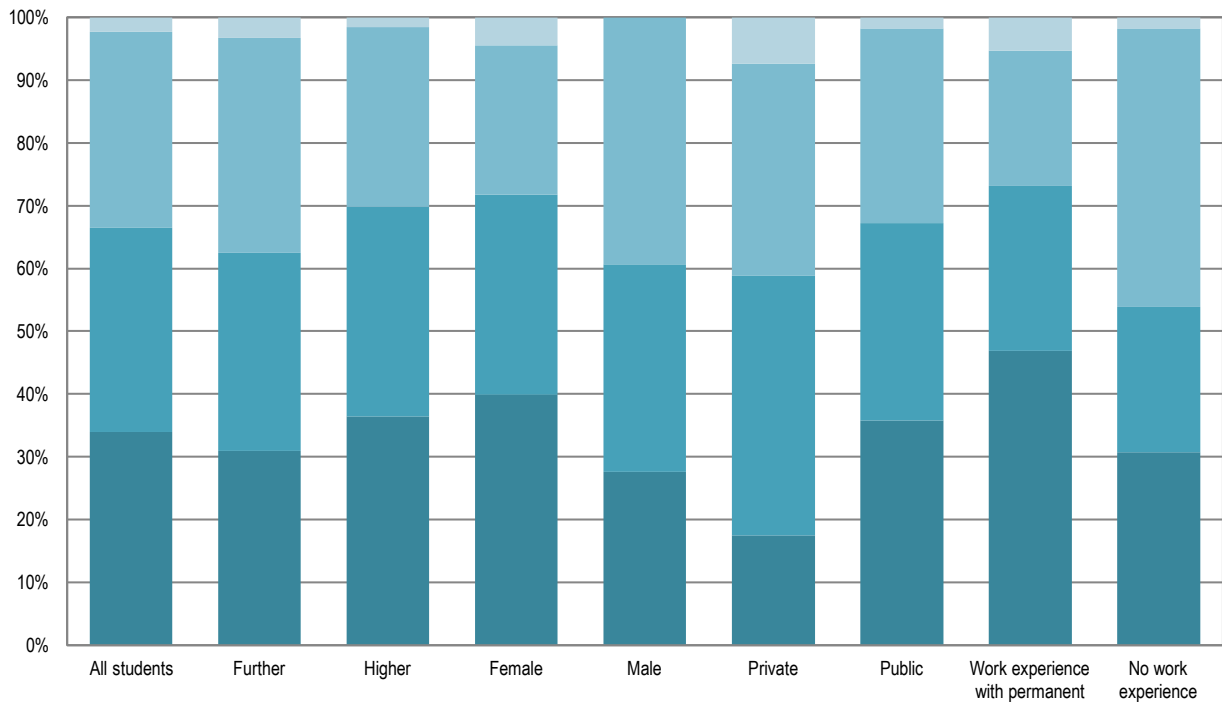


Figure 15: Difficulty finding employment as perceived by graduates currently searching for employment



However, further education graduates seem to rely more often on their personal contacts (44.2% of further education graduates and 36.4% of higher education graduates) and on help from their institutions' services (17.6% of further education graduates and 7.4% of higher education graduates).

The three most frequently used job search strategies were also the ones used by the highest shares of both males and females, however, it is noticed that females tend to be more actively involved in their job search as higher shares of females had picked up almost all of the strategies compared to males who only formed higher shares using personal contacts for finding a job (45.5% of males and 34.9% of females). So in general, males appear to be more passive in their job search and tend to rely on help from others.

This same pattern can be observed between those graduates with higher education background and those without higher education backgrounds, where graduates without higher education backgrounds tend to use more often all of the possible job strategies except visiting

the sites of potential employers or through personal contacts. These two strategies were more often chosen by graduates with higher education backgrounds.

Graduates, who have previous work experience, had used all strategies more often than those without previous work experience in the labour market before their current job. These graduates may have more experience on the labour market, particularly with regard to job search, and feel more confident using the different strategies to search for employment.

Difficulty in finding employment

Graduates, who were searching for employment, were asked about their perceived difficulty in finding employment. Respondents could answer very difficult (1); difficult (2); neither difficult nor easy (3); easy (4) or very easy (5). The arithmetic mean for all students was 2.02, which means that on average finding employment was considered as difficult. Indeed, none of the graduates, who were searching for employment, found it to be very easy (5).

Vocational graduates (2.07 compared to 1.99 of academic graduates); those who completed a further education level (2.10 compared to 1.95 of higher education graduates), and those who followed their programme full-time (2.05 compared to 1.66 of part-timers) reported to have found it easier to find employment than their counterparts.

Females (1.93 compared to 2.12 of males); graduates without higher education background (1.95 compared to 2.00 with higher education background) and from public institutions (1.99 compared to 2.31 from private providers) tended to rate more severely their difficulty finding employment. As has been seen previously, these groups of respondents were the ones who were more actively searching for employment, probably because they believed that finding jobs was more difficult.

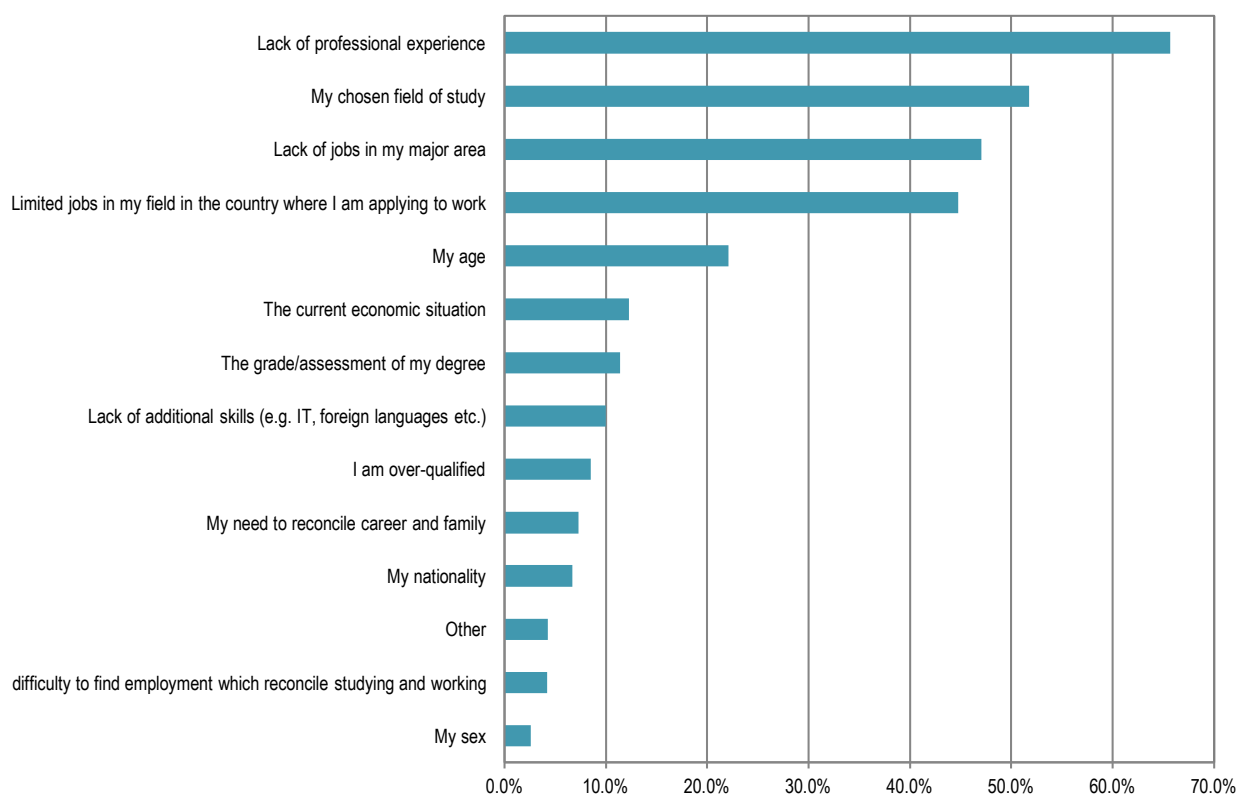
Reasons for difficulty in finding employment

Graduates who found the job search to be difficult or very difficult were asked about the reasons for their perception. The reason

most frequently mentioned was the lack of professional experience, which was mentioned by 65.7% of graduates, who considered their job search as difficult or very difficult. This is more often mentioned by full-time graduates (68.8%) and those with a higher education background (76.3%). Higher shares of those not working (72.3%) and with less previous experience (76.8% of those with previous work experience without permanent job and 72.7% of those without prior work experience) mentioned this reason as well. It seemed that graduates struggle to enter the job market when they lack work experience and this is also supported by 22% of respondents, who answered that their age was a problem in finding jobs. Indeed, this was mentioned more often by young graduates, which suggests that young graduates have more problems than the older ones due to lack of professional experience upon completing studies.

Another reason frequently mentioned as an obstacle to finding employment is the graduates' chosen field of study (51.8%).

Figure 16: Reasons for difficulty in finding employment as rated by graduates



However, a deeper analysis by the different fields of study cannot be done as the cases for each field of study are too few to generalize any conclusions. Linked to this, respondents also frequently cited the lack of jobs in their major area (47.0%) and in Malta in general (44.8%) as reasons for their difficulty in finding employment. Thus, the lack of work experience and the lack of labour market opportunities appear to be the major obstacles for graduates to find employment.

It is also important to note that 4.7% of females and no males responded that their gender makes it more difficult to find jobs. Females were also more often concerned about reconciling employment with their family lives (8.6% compared to 5.6%), which suggests that the role of taking care of the children in the family remains more often with females. Part-time students also mentioned this reason more often (23.8%) than full-timers (5.1%), which suggests that those who studied part-time might have done so due to family as well as work responsibilities they have in addition to their education.

4.3. Relationship between studies and current employment

Requirement of qualification or additional training for current employment

Graduates who were employed at the time of filling in the survey were asked whether their 2013-2014 qualification was required for their current job and whether any additional courses or training sessions were required for their current job. Out of all graduates, 45.7% declared that their qualification was not required for their job and 63.8% stated that they did not require any additional courses for their job.

Graduates from further education declared more often that their qualification was not required (56.4%). An explanation might be that these graduates are seeking casual jobs alongside further studies, which do not require a particular qualification, given that 90.7% were undertaking further studies after having completed their previous qualification in 2013/2014.

Part-time students had 60.0% of them whose qualification was not required for their job. This can be explained because part-timers are more likely to have had their employment before completing their studies. This is true for all graduates, who had their jobs before completing their studies, where more than 73% of them did not require their qualification for their current employment.

Graduates from the fields of education (69.8%) and health and welfare (68.1%) have most often jobs that required their qualification, whereas those from humanities and arts (39.2%) have the lowest shares of them with jobs that required their qualification. This may be linked to regulated professions in the field of education and medicine.¹⁵

Graduates, who had work experience including permanent jobs, tended to have higher shares of them whose jobs required their qualifications (61.8%) compared to only 49.8% of those without experience. The former might have been working in different fields and their qualification would have allowed them access to their current position. Those without experience are most likely employed in jobs which are not directly related to their studies or requiring a lower level. Since lack of professional experience was mentioned as the most important reason that makes it difficult to find jobs, graduates might be gathering years of work experience, before applying for their desired job. This is further reinforced by looking at the difference between those searching for employment despite having a job with 67.2% of those searching for employment being in jobs, which did not require their qualification, compared to only 43% of those not searching for employment. It was also mentioned earlier that a share of those who had no experience had been in their job for a long time before their graduation; this suggests that another possible scenario for those without experience is that their current qualification was not a requirement for the job when they first entered it.

15 For the list of regulated professions see: <https://ncfhe.gov.mt/en/services/Documents/Mutual%20Recognition/Designated%20Authorities.pdf>

All groups, who had high shares of graduates in jobs that did not require their qualification, have reported more often that additional courses or training periods were required for their employment. This means that employers tend to make up for the lack of qualifications by requiring certain training periods. Those searching for employment other than the one in which they were currently engaged in, were the highest to report that they were in jobs that did not require their qualifications (67.2%) but also in jobs that did not require any further training (75.8%). This might mean that these graduates were overqualified for their positions and would be searching for jobs that better match their qualification and abilities.

On the other hand, graduates from the fields of health and welfare reported most frequently to be in jobs that required their qualification (68.1%), but also additional courses or training periods (44.4%). This is explained by the nature of employment in the medical field, which is not only a regulated profession, but also requires extensive training as a link between the study programme and actual employment.

Relationship between studies and employment

In an attempt to capture the skills match/mismatch as perceived by the graduates themselves, those who were employed were asked about the extent to which their current occupation was related to their field of study. They were also asked to rate the extent to which they were utilizing the skills and competences they acquired during their studies in order to capture the personal assessment of how adequately qualified they are for their employment. Answers were coded as 1 for not at all, 2 for some, and 3 for very strongly. On average, graduates rated the link between their studies and their employment as 2.22, while judging the use of skills acquired through their studies in their current job slightly less positive as 2.2. This

indicates that graduates generally perceived the relationship between their studies and their employment to be average to slightly positive.

Graduates from vocational institutions, higher education levels, and part-time programmes rated both the relationship between the field of study and their occupation, as well as the extent they were using the skills in their employment more positively.

Graduates from the fields of education and health and welfare rated the relationship between education and employment and the use of their skills most positively, whereas those from humanities had the lowest ratings for both aspects. Again, this may be due to the fields of education and health and welfare generally preparing graduates for regulated professions. Thus, the link between studies and employment is expected to be quite strong and, indeed, graduates confirm that this is the case.

Those graduates who started their employment after completion of their studies perceived the relationship between their studies and employment to be stronger (2.25 for the link between studies and job; 2.19 for the use of skills in the job) than those who retained the job they had during their studies (2.13 for the link between studies and job; 2.19 for the use of skills in the job). Furthermore, graduates with previous professional experience also tended to rate the relationship between education and employment more positively (2.28 for the link between studies and job; 2.24 for the use of skills in the job) than those without previous experience (2.19 for the link between studies and job; 2.20 for the use of skills in the job).

The considerably lower ratings provided by those who are searching for jobs (1.78 for the link between studies and job; 1.75 for the use of skills in the job) suggests that the dissatisfaction of these graduates with their current employment is due to mismatch between their level and field of education and their current employment.

To sum up this section, it seems that those, who were in employment which required their qualification, were less likely to be required to have additional courses or training sessions before the start of their employment, and rated the relationship between their studies and their employment as well as the extent to which they used the skills acquired during their studies more favourably. The following section looks into the extent to which this link between studies and employment as well as the use of skills acquired during studies in the job translates into graduates' job satisfaction. One might expect that a close link between studies and employment and the use of skills acquired during studies will lead to higher levels of satisfaction among graduates, while those reporting a low connection between studies and employment or a limited use of their skills would be less satisfied.

4.4. Job satisfaction

In order to capture the reasons for the graduates satisfaction or dissatisfaction with their employment, they were asked to rate different aspects of their employment. For each of the different aspects respondents were asked to indicate whether they were dissatisfied (1); neutral (2) or satisfied (3) with the aspect. Graduates rated well their overall job satisfaction (2.56). The salary level (2.04) and opportunity for promotion (2.08) were the aspects with the lowest levels of satisfaction among graduates.

Academic graduates are more satisfied than vocational students with their employment. They seemed more satisfied with their salaries (2.09) than vocational graduates (1.96). They particularly rated their job security more positively (2.55 academic graduates; 2.14 vocational graduates) and the opportunity for promotion (2.12 academic graduates; 2.03 vocational graduates), which suggests that those graduates believe they have better career prospects than their counterparts from vocational education. This difference in job

satisfaction might be linked to graduates from academic programmes being more likely to be managers and professionals (60.0%), and hence obtain higher income levels, than those from vocational education (36.4%), while the latter are considerably more often technicians and associate professionals or trade workers and earn less than their counterparts.

Graduates who followed their programme part-time were overall more satisfied with their employment (2.62 part-time graduates; 2.54 full-time graduates), specifically in regard to its job security (2.63 part-time graduates; 2.47 full-time graduates). However, full-time graduates were more positive regarding opportunities for promotion (2.10 full-time graduates; 1.98 part-time graduates).

Graduates from the Northern Harbour seemed to be more satisfied than all other graduates about almost all aspects of their employment. Those from the Southern Harbour were the least satisfied mostly with regards to their salary levels (1.97 compared to 2.04 for all graduates) and the opportunity to use the skills acquired (2.38 compared to 2.46 for all graduates).

Differences by fields of studies were analyzed as well. Graduates from the



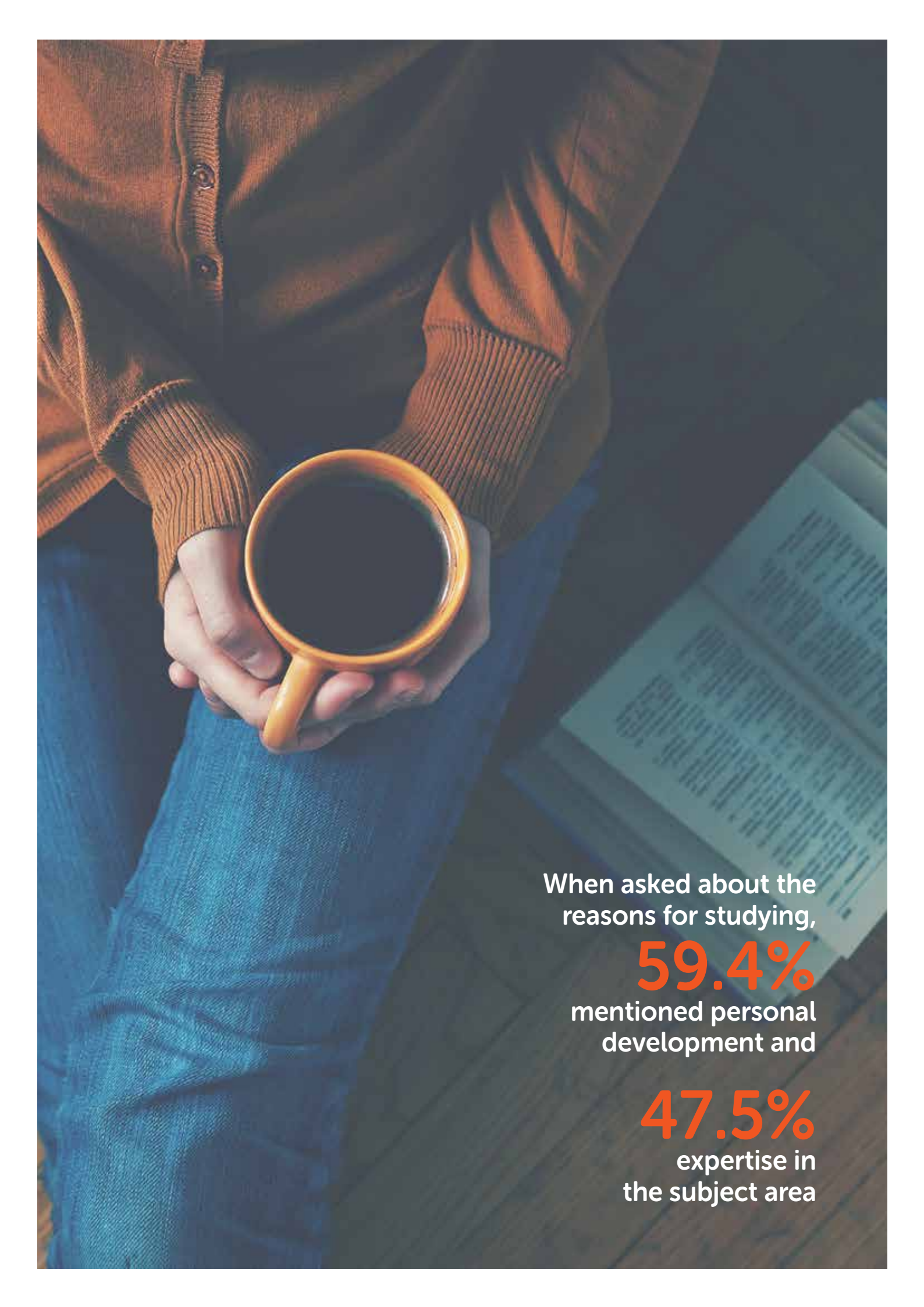
education field seemed to be the ones most satisfied in general about their employment (2.62 compared to 2.56 for all graduates). Although they rated salary (1.71 compared to 2.04 for all graduates) and opportunities for promotion (1.93 compared to 2.08 for all graduates) lowest among their peers, they had positive feedback on the working hours (2.62 compared to 2.48 for all graduates). Graduates from health and welfare (2.60 compared to 2.56 for all graduates) and social sciences, business and law also rated their employment very positively (2.60 compared to 2.56 for all graduates). Indeed, the latter had the highest rates among their peers on job security (2.64 compared to 2.50 for all graduates), level of responsibility (2.61 compared to 2.52 for all graduates), opportunity to use skills (2.55 compared to 2.46 for all graduates) and to get promoted (2.16 compared to 2.08 for all graduates). This may be linked to graduates from social sciences, business and law being more often employed as managers or professionals (64.4% compared to 51.4% for all graduates). Given that these positions are more often associated with higher levels of responsibility and salary, this may explain the higher levels of satisfaction amongst graduates from this field, particularly with

regard to the use of their skills and levels of responsibility. Graduates from these two fields of study were also those who had the highest shares of graduates earning more than 30000 Euros annually and the lowest shares of graduates earning less than 15000 Euros when compared to shares of graduates in the other fields of study.

Graduates with previous work experience including permanent jobs were more satisfied about their employment (2.61 compared to 2.56 for all graduates) particularly concerning their job security (2.57 compared to 2.50 for all graduates), responsibilities (2.59 compared to 2.52 for all graduates), the opportunity to use skills (2.54 compared to 2.46 for all graduates) and the opportunity for promotion (2.12 compared to 2.08 for all graduates). This indicates that previous work experience helps graduates find and access the jobs, which fit their skills and fields of study. However, the satisfaction with the salary level does not appear to be affected by the past work experience a graduate had as no difference in assessment could be found (2.04 compared to 2.04 for all graduates).

As for those who are searching for a job, it was obvious that they were by far more dissatisfied with their employment (2.06) compared to those not searching for a job (2.62). They rated their salary levels (1.58 compared to 2.10 for those not searching for a job) as particularly negatively, apart from the opportunity for promotion (1.65 compared to 2.13 for those not searching for a job) and the opportunity to use skills (1.93 compared to 2.53 for those not searching for a job). This confirms the previous findings that graduates searching for a job are more often in lower paid positions that do not fully draw on their acquired skills and provide them with limited opportunities for advancement. Searching for alternative employment appears to be, therefore, the main strategy for these graduates to advance in their career.





When asked about the reasons for studying,

59.4%

mentioned personal development and

47.5%

expertise in the subject area

DISCUSSION AND RECOMMENDATIONS

The main aim of this research project was to develop a clear picture of the situation of graduates after completion of studies. This research should be able to assist stakeholders in the decision making process regarding the responsiveness of education, on the supply side, to the situation of labour market, on the demand side. On the other hand, this research project was a learning experience regarding nationwide graduate tracer studies in Malta.

In this section, discussions of the main findings will be presented along with some relevant recommendations. Furthermore, a number of drawbacks related to the research project have been identified and should be kept in mind for future graduate surveys.

Future graduate tracer studies

There is a need for regular graduate surveys to allow for monitoring over time, especially with regard to graduates' transition into the labour market and their labour market outcomes.

This cross sectional graduate survey does not allow capturing the long-term or mid-term development of the graduates. Little can be said about employability, career stability and long term success on the labour market. It is, therefore, equally important to have longitudinal panel graduate surveys to trace the situation of the same graduates periodically over a longer timeframe.

There was an attempt within the scope of this study to retrospectively capture the long-term career development of graduates by asking them about their work experience in a curriculum vitae format. However, this was obtained only to a limited extent for several reasons. Firstly, because the number of graduates, who already had an extensive work experience, was limited. Secondly, while the interplay between education and

employment pathways may be captured at an individual level, it was difficult to translate these personal biographies into common comparable variables for analysis. Thirdly, the curriculum vitae format adopted resulted in a very lengthy survey for older graduates with more extensive education and employment history. Thus, for future surveys a different format should be adopted so as to avoid repetitive questions that result in participants dropping out from the survey.

The success and impact in the use of graduate studies is highly dependent on the availability of accurate data on graduates along with their contact details to be able to invite them to participate in the research. In this regard, a strong cooperation with education institutions is pivotal to be able to reach the target audience of this research.

There have been a number of major topics that recurred in many sections of the report. These will be discussed here as some recommendations can be concluded from them.

Continuation of studies after graduation

Promoting participation and attainment in further and higher Education in Malta is important both from the perspective of fostering the future potential for innovation and economic growth and to reduce socio-economic differences.

To this end, flexible pathways and modes of study in further and higher Education are important to allow individuals to enter, leave and re-enter education and to reconcile studies with other commitments they may have.

This research study has shown that there is an institutional as well as a cultural divide between academic and vocational education in Malta. Permeability between both types of institutions is not fully reached yet especially in terms of what concerns the movement of students from VET post-secondary education to academic higher education programmes. It was also shown that students without higher education backgrounds are more likely to go into vocational programmes which confirm the cultural divide between both strands of education provision. Institutions need to address this issue so as to allow a better choice for students at any given time of their educational career. This can be achieved through ensuring access conditions into higher education that take into consideration different types of further education as well as the validation and recognition of informal and non-formal learning.

Apart from improving the permeability between different educational pathways, supporting diversification may increase participation in further and higher Education.

This may include further strengthening and expanding vocational education and training, including up to postgraduate level. Since graduates from vocational programmes were found to be more likely to enter the labour market after graduation and not to continue their studies, such diversification of provision may provide them with ample choice to further their education in the same type of institutions should they wish to do so. Along the same lines, diversification through private provision in further and higher Education was found to attract in particular mature students to return to education.

The data also showed that these providers offered studies more often through distance or blended learning, which may be more suited to the needs of students with other commitments apart from their studies. Thus, for those graduates who prefer to enter the

labour market, part-time studies, on the job continuous training and work based courses could be followed as up skilling strategies to ensure long term benefits of further education. Through continuous development and lifelong learning, graduates from vocational education, who have been found to be more likely in lower occupations than their peers from academic education, will be provided with an opportunity to further their studies and advance in their careers.

Transition into employment

The data indicated that most graduates are in employment (60.4%), of which 25% retained the job they had before completing their studies, suggesting that a considerable proportion of students undertake their studies alongside employment. The others took about 9.74 months to find their current job.

Out of all graduates that are currently in employment, 54.3% indicated that their qualification was a requirement for their job, which appears rather low. However, one has to bear in mind that those graduates, who undertook their studies alongside employment, would have entered their job with qualifications other than the one they attained in 2013/2014. Thus, for these graduates, who made up 25% of all graduates in employment, their qualification would not have been a requirement for their job. The link between studies and employment is further supported by the fairly positive assessment of graduates of the relationship between their studies and employment and the use of

Out of all graduates that are currently in employment, 54.3% indicated that their qualification was a requirement for their job, which appears rather low

skills gained through their programme in their current job.

Out of all graduates 14.7% are currently searching for employment. This indicates that considerable shares of graduates, who are already working, are searching for alternative employment. The data also indicates that these graduates consider it rather difficult to find employment. Furthermore, the high shares of those graduates who are still searching for employment despite being employed suggest that the jobs those graduates are finding after their search for employment do not always match their expectations. More support about strategies for employment search might be of assistance to students in general. This appears to be of particular importance for those fields of study that do not prepare students for a particular field of work, such as those in regulated professions. This was evident, given that graduates from education, and health and welfare appeared to face less difficulty in finding employment, compared to graduates from the humanities and arts, who were found in this study to be the ones facing most difficulties in their transition to employment although this is the field which had the third highest shares of graduates.

The education institutions can play a major role in preparing students for the search for employment by organizing job fairs, career guidance or sessions on job search strategies. There is much work that can be done on institutional levels since the shares of graduates who have answered that they were helped by their institution to find employment was relatively insignificant when compared to other strategies.

Institutions can also play a role in better preparing students for the labour market, given that graduates in general have rated their preparation for work the least among all other skills acquired during their studies. Entrepreneurial skills, work ethics, and independent learning, and other generic skills, need to be targeted throughout the study programme in preparation for employment after completion.

However, in order to better respond to the skills needed in the labour market, especially

with the rapid ongoing changes in the nature of employment, continuous labour market studies should be conducted to identify the skills shortages as well as to forecast the demands of the labour market.

Work experience alongside studies

When asked about the reasons for studying, most graduates mentioned personal development (59.4%) and expertise in the subject area (47.5%). Most of them would have chosen the same programme (86.4%) and the same institution (83.4%). So on the whole, students are satisfied with the education experience, particularly the extent to which they are capable to self-assess their knowledge, skills and competences, have gained command of their field of study and are capable to organise and plan. They also mentioned that they wanted better career prospects. However, when they were asked to rate the extent to which they acquired specific skills during their studies, preparation for work was the skill rated lowest. So while graduates are satisfied with the subject specific preparation through their programme, they would appreciate a stronger link between their studies and the world of work.

This sheds light on a potential problem area in the link between the education system and the labour market. This is also evident in the fact that 53.9% did not have a work placement during their studies or that those, who work alongside their studies, particularly at lower levels of education, do so more often in casual jobs that likely are not closely related to their studies. To ensure that students are retained in the education system for further studies and benefit from the long term benefits of extended education, it is crucial to enhance the relevance of the study programme for the students involved. Therefore, showing how relevant the study programme is to the employment and career of graduates is key to ensure student retention and lower dropout rates.

When analyzing the transition to the labour market and the job satisfaction of graduates, the role of previous work

experience was obvious in the type of employment found. Higher rates of graduates with experience were found to be employed after completing their studies despite having lower rates who remained in the same employment they had during their studies. Those graduates were in full-time jobs more often than their counterparts without previous experience. Higher shares of them were in positions, which required their qualification and rated the extent to which they were using the skills acquired during their studies more favourably. They were overall more satisfied with their employment. This implies that work experience positively affects the match between studies and employment and the job satisfaction.

It becomes important to search for ways to integrate employment during studies so as to expose students to the labour market during their studies. One of the strategies that can be followed for this purpose is work based learning through apprenticeships and work placements. Institutions can include internships and work placements as requirements for their study programmes. These would serve as windows in the syllabus for undertaking work placements. Skills attained through work placements can be recognized towards the total credits needed to complete the study programme. Fostering cooperation between the education institutions and enterprises can open possibilities for work based learning and training positions for students on one hand, and can encourage teachers and trainers to update their knowledge about the current labour market needs on the other.

This study has shown as well that the students in Malta are likely to take up jobs during their studies even when this would mean, for many of them, taking up seasonal or casual employments during semester breaks. Such work experience, particularly if it is related to the students' field of study, could be very beneficial both in terms of gaining work experience and applying learning in practice. Thus, it could be useful to expand such opportunities by encouraging and facilitating short-term employment contracts which

present opportunities for short-term positions in occupations related to the students' studies. This would help the students, who are willing to work during their studies, to gather work experience which is relevant to their studies and would facilitate their access to more permanent positions after completion of studies.

Another strategy to allow students to work during their studies is to have more flexible study programmes as will be discussed in detail in the following section.

Flexible provision of study programmes

This study presents more evidence about the increasingly diverse student population in Malta. Non-typical students encountered in this population of graduates are those in terms of age, work and family responsibilities, country of residence during studies, and purpose and reason of studies. Education providers have to cater for the needs of this heterogeneous student body. A more flexible provision of study programmes (full time/part-time, or on campus/distance learning) at all MQF levels and in all types of institutions might encourage older students to return to education, who may have family and work commitments besides their studies. Outreach programmes to raise awareness about such programmes and funding opportunities for these may also increase participation of mature students, those needing a second chance in education, or those that have family responsibilities.

Furthermore, when graduates were asked about the reason for not pursuing further studies, answers provided showed once again that individuals need to work for financial support during their studies; however, this leaves them with very limited time for studies. Keeping in mind the advantages of work experience for career advancements, as was discussed in the previous section, one effective means to have a balance between work experience, further studies, and other personal responsibilities, is to provide study programmes that are flexible and that cater to the diverse students' needs and styles.