

Identifying the point of need for Information Literacy Sessions and the best way to promote them: A case study for the University of Malta

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Abbreviations

ALA - American Library Association

ACRL - Association of College and Research Libraries Competency Standards

IL - Information Literacy

UML - University of Malta Library

UM - University of Malta

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

This work is the result of my own investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s).

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Abstract

This research investigated the most appropriate time for the University of Malta Library to provide information literacy workshops. This study looked into the student's willingness to attend workshops at various points during the academic year by organizing monthly workshops and compare attendance. Additionally, different marketing channels were used and assessed to promote such sessions. As a result, information on the usefulness of the sessions was collected from participating students to identify whether an introduction to information literacy was enough or if the Library should develop a more detailed workshop/or series of workshops. Both quantitative and qualitative methods of research were used for this study. Bookings for different sessions were recorded together with year of study and students details. A short anonymous questionnaire provided feedback on the sessions including identifying aspects of marketing the students are more likely to engage with. The research will directly impact the University of Malta Library as it will guide future development with regards to workshops and marketing the Library may wish to create.

Chapter 1: Introduction

With the introduction of new technologies and constantly evolving landscape, information professionals have to keep up to date with new trends and the skills required using such resources. As a result, libraries and information centres are faced with new challenges that are shaping their roles in this modern age. Kaufman (2005) states that “As many libraries provide access to more current digital than tangible content, academic libraries and academic librarians will begin to carry out their traditional roles, and take on new ones.” This however, does not mean that old roles have to be scrapped completely. On the contrary, these traditional roles will simply have to adapt and change to cater for the new environment. For example, new collection development policies will have to integrate digital information and find ways to provide better access to online resources. This will push the academic library to remain vibrant and relevant in the digital environment. As a result old services, which users might perceive as useless in today’s digital society, are actually more important than ever.

The basics on how to search for information, and evaluate the reliability of said information have become integral in order to effectively navigate the information overload. One of the aspects that is constantly changing, is how individuals are accessing and retrieving information. New challenges provide an interlude for innovation and invention and therefore the academic library should be seen to be the forefront in the battle to promote an information literate society. King (2005) and Hiller (2001) have mentioned that the information needs, expectations and behaviours are continuously changing in the rapidly changing information scenario. This places academic libraries on the forefront of teaching future leaders information literacy (IL) skills which can be used in the context of different technologies and industries. The basics of IL have not changed so the library has become the primary institution where such skills can be learned. As a result, libraries have to start making themselves more visible and appeal to users in order to effectively show/teach users proper IL skills while also increasing the awareness of the number of services they offer to their patrons.

Academic libraries need to start blowing their own horn (Kennedy Hallmark, Schwartz, & Roy, 2007) and make themselves more visible using different marketing strategies in order to promote old and new services to the changing university population. Academic libraries cannot simply open their doors and expect to be perceived as the number one option for information services.

Consequently, the University of Malta Library's (UML) should strive to develop new services for the new information era by being abreast with the constant changing needs of its users. The UML's basic function has always been to provide education, support teaching, learning, and research in line with the research goals of the University of Malta (UM) as a whole. The Library provides a number of services catering for the needs of staff and students of the academic institution across various disciplines and subjects. To this effect, an Outreach Department was created at the UML in 2012; with the main aim to market the UML's services and provide feedback on new services to offer.

The Outreach team duties require members to answer questions about the Library and inform the University community of new Library services, programs and resources. This requires an open dialogue between the UML and all its patrons/stakeholders. The team dedicates its energy to reach the ever-expanding University audience: from students and student organizations, to support staff and academics by making use of the communication channels available. The Department is committed to provide assistance and support to all the patrons on Library services such as HyDi (Hybrid Discovery tool of the UML) and RefWorks (Bibliographic management software). Other services include organising monthly workshops teaching students, who can book for these sessions online, how to use several resources provided by the library, including online databases, repositories, etc... Another objective of the Outreach Department is to identify potential marketing campaigns and adapt them to the UM environment. For this reason the Department periodically conducts user needs surveys in order to identify any gaps in the services provided by the UML and/or discover new initiatives that could be introduced by the UML (Scicluna, 2015).

Chapter 1.1: Issue

In 2016, the Outreach department of the UML conducted a user needs survey to assess the awareness of services amongst its patrons. The report identified a gap in the needs of the UML patrons and indicated that a number of UM students lack IL skills, which would aid them when conducting research using the library resources or in everyday life situations. Undergraduate students had poor research skills and highlighted problems on how to conduct academic research, how to navigate and use the library's resources, what databases are and how to use them effectively. This implies a lack of awareness of library resources amongst library patrons. Furthermore, the results showed that first year students tend to adopt a relatively unsophisticated, simplistic approach to searching. Most students did not have an awareness of Boolean operators. The few students who did have knowledge of Boolean operators did not know that they could be used in most search engines such as Google Scholar, subject oriented databases or even HyDi. In addition, the 2016 survey highlighted the fact that most students were unaware or not comfortable searching in academic databases or even Google Scholar. Furthermore, undergraduate students were not familiar with how HyDi operates and/or found it too overwhelming. Most respondents simply searched in Google for all their research questions. The UM librarians also noticed that a big number of students who responded to the survey, possess poor IL skills, as they did not know how to identify the best way to retrieve needed information or how to evaluate retrieved information.

This outlined a lack of knowledge, which is not being catered for during course lectures. Academics and lecturers do not teach IL skills as they cannot afford to allocate time during their lectures. As a result, Varlejs and Stec (2014) point out that some teachers might not be interested in raising the research skills of their students, and thus end with students who do not evaluate the sources they find on the internet, believing them at face value. McGuinness (2006) argues that Faculties do not help to solve this issue as they believe that student will develop IL skills independently through their research, even though, the faculties do not have a clear expectation on how students will specifically gain this knowledge.

On the other hand, students have demonstrated that they will not spend time learning these skills if it is not a specific graded part of their assignments (McGuinness, 2006). This points to the need for an institution on campus to provide formal training and as Wong and Web (2011) point out, library utilization increases students' academic performance. For this reason the UML realised that students are in need of an information literacy course, which can provide them with the basics in order to effectively navigate the information world and be able to conduct academic research at university level.

Chapter 1.2: Aims, Objectives and Significance of the study

Following a model developed by Eisenberg and Berkowitz, known also as Big6 model of information skills, the UML developed a workshop to address the needs of UM students. The Big6 model was chosen because it represents all the basics skills that are useful for problem solving and information seeking, regardless of what education level, age, field of study and/or profession.

Developing and delivering a workshop, however, does not help students if they are not aware of the workshop or cannot attend due to a busy schedule. As a result the UML has to identify the maximum point of engagement and the point of need for UM students. This means identifying the right period for organising IL workshops and also identifying at what level such workshops would be the most useful (first, second, third, final year of study, etc..). In order to reach all UM students with the information on the IL workshops, the UML has to create an effective marketing strategy. It would be pointless to organise such important workshops during the busiest scholastic period or during exams as this will make it very hard for students to book and attend these workshops during free hours. As a result and to effectively deliver IL workshops, the UML needs to know when the ideal period is to organise these workshops.

The aim of this research is to point out the periods from a scholastic year, best suited for the library to organise such workshops. This means, students will be more likely to attend, follow, and learn at their own pace since it would be the ideal time for them to acquire IL skills. Furthermore, feedback from the IL sessions will inform the Library on whether a single introductory workshop is enough or more detailed workshops are needed. Subsequently, the research will also point out the best channels and tools the UML can use for marketing and promoting services and other workshops. Subsequently this research's goals are to help UML librarians identify:

- the right time for the UML to organise similar IL workshops (which months and periods during the day are students more willing to attend workshops)
- the best marketing channels and tools the UML can use to reach UM students (in order to maximize the efficacy of Library marketing on all levels)
- The ideal level of information to provide during the IL workshops (general introduction or more detailed course)

In order to effectively identify the right time to organise IL workshops for UM students, the UML conducted a series of workshops during the scholastic year (2018-2019). Each workshop was promoted using various marketing channels and tools. After each workshop students were asked to fill in a feedback questionnaire designed to answer the above mentioned research goals.

This research will aid the UML in catering for the needs of its patrons by offering tailored workshops addressing IL skills. Consequently this study will allow the UML to organize said workshop at the most opportune time for students to attend. This will make it cost effective for librarians to spend time organising and delivering such workshops. On the other hand, the research will also highlight specific marketing channels that the UML can use to better target their audience.

Chapter 1.3: Research Overview

This research utilized a mixed method approach (quantitative and qualitative) in order to accurately gather and analyse results.

- Quantitative – A number of workshops were organised monthly during the scholastic year (2018-2019) and students were able to book for their preferred date by email, phone or in person at the Library. Bookings for different sessions were recorded together with year of study and students details in order to identify the most popular period and availability of students to attend the workshops.
- Qualitative – After each session, participants were asked to fill in a short anonymous questionnaire, which provided feedback on the general session while identifying aspects of marketing the students were more likely to engage with. The questionnaire also inquired whether an introduction was enough or students would prefer more detailed sessions on Information Literacy.

A literature review in Chapter 2 discusses research on marketing in an academic library context and point out marketing techniques used by other libraries to promote services and resources to different patrons. A marketing plan for the implementation of the IL workshops is highlighted in Chapter 3. Chapter 4 illustrates in detail the methodology chosen for this research by giving a brief description on the research methods used and highlights any limitations discovered. All the data collected, is analysed in Chapter 5 by observing the attendances from the monthly workshops and looking at answers given in the short anonymous questionnaire filled in after the each session. Finally, chapter 6 concludes the research by answering the objective questions of this research using the results from chapter 5. Chapter 6 includes future recommendations for the UML and highlights the most effective marketing tools the Outreach department can use to promote UML services to UM patrons.

Chapter 2: Literature Review

2.1 Importance of Information Literacy

According to Lloyd (2017), IL is conceptualized as a practice which contributes to our performance in everyday life and which, when explored carefully, references the context that shapes and enables that performance. This means that IL skills have become an essential learning tool but also function socially in a society. Lloyd (2010) explains that IL is understood in broader terms, rather than restricted to enactments related solely to text-based mediums (print or digital). The practice is also present in a corporeal and social sense, meaning, it does not just connect us to epistemic/instrumental ways of knowing, but also to local, nuanced, contingent and embodied forms. Becoming information literate requires the development of a meaningful understanding of how knowledge is constructed, located, situated and valued within a landscape and the range of activities that enable information to be drawn from that knowledge base (Lloyd, 2017). This requires competence (relevant skills and knowledge) and an ability to relate to social and material practices (Shove, Pantzar and Watson, 2012).

Bateson (1972) argued that information is a 'bit' or an idea which, when accessed, made a difference, which implies change. The difference is, therefore, a change of some sort to knowledge, including ways of knowing, which may produce positive, negative or neutral effects (Lloyd, 2017). Now more than ever IL requires individuals to negotiate meanings and information through their surroundings. Recent research positions IL as a complex socio-cultural practice that is shaped through the negotiated meaning making of a community (Touminen, Savolainen and Talja, 2005). According to Lloyd (2005) and Bilal (1989), IL is social and dialogic, shaped through the negotiated meaning making and discourses that are constructed around activities. As a result, information seeking behaviours are being affected not only by the information problem but also by accessibility and time management issues. Foster (2004) explains in his non-linear model of information seeking that the information need, and subsequently the information seeking behaviour, is shaped by the limits of time and financial resources.

In a review of strategic plans of academic libraries, Saunders (2015) comments on the fact that 31.8% (20 plans) of the strategic plans, included assessment of student learning for IL and/or library instruction as a priority for their library's goals. This reflects the fact that more academic libraries are prioritizing on IL skills training for their users. Caldwell (2005), states that academic libraries are focusing more on IL and instruction, storage challenges, and personnel issues. Long and Shonfeld (2013) comment on the fact that academic library directors still see the library's instructional roles and support IL training as one of the most important roles of librarians. This may have far-reaching implications vis-a-vis how Libraries prioritize their other functions (Long & Shonfeld, 2013). Following the influx of fake news and misinformation, IL skills have become even more important. As a result, academic libraries are required to reskill and train professionals in new proficiencies in order to provide new services and open new positions within the academic library environment.

The American Library Association (ALA) believes that “developing lifelong learners is central to the mission of higher education institutions” and that “IL is a key component of, and contributor to, lifelong learning” (ALA, 2000). It is vital that every individual develops the intellectual ability to reason and think critically. Therefore, colleges and universities “provide researchers with the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities” (ALA, 2000).

Furthermore, the Association of College and Research Libraries Competency Standards (ACRL) demonstrate that developing lifelong learners is central to the mission of higher education institutions” and as such “incorporating IL across curricula, in all programs and services, and throughout the administrative life of the university, requires the collaborative efforts of faculty, librarians and administration (ACRL, 2000). A study by Yang and Chou (2014) found that the majority of academic libraries have embraced the strategic mission and planning for IL and have provided information literacy services on the Web.

Julien, Gross and Latham (2018) point out that as IL is widely understood to provide a critical foundation for success in daily life, the workplace, and in civic engagement, it is important to promote the best practices for IL instruction.

2.1.1: The Information Literacy Workshop

The UML is a multidisciplinary library catering for all the courses offered by the UM. The Library's mission is to support the University's teaching and research programmes by providing adequate scholarly information resources, keeping abreast with emerging technologies and supporting user services. "As a customer-oriented and service-driven organisation, the Library is actively committed to teach users how to identify, locate, evaluate, use and synthesize information as the pivotal element of a knowledge-based society which is an asset to the prosperity of Malta's intellectual and economic growth" (University of Malta, 2018). For this reason the UML makes it a priority to maintain and develop new services in relation to current trends and new technologies to better assist and help researchers at all levels to achieve their goals.

In order to cater for the user needs identified in the User Needs report of 2016, the UML decided to develop an introductory workshop aimed at teaching IL skills to UM students. The course is based on a model developed by Eisenberg and Berkowitz, known also as Big6 model of information skills.

"The Big6 is an approach that can be used whenever people are faced with an information problem or with making a decision that is based on information. Students—K-12 through higher education—encounter many information problems related to course assignments. However, the Big6 is just as applicable to professional or personal life" (Eisenberg 2008).

The model is divided into six steps that will be used to outline the course content and skills that should be acquired by the end of the session. The model is easy to understand and follow, and it will allow students to master skills essential for pursuing a university level course.

The Big6 model consists of six stages:

- Task definition
- Information seeking strategies
- Location and access
- Use of information
- Synthesis
- Evaluation

Task definition helps students to define the information problem and identify the information needed. Information seeking strategies teach participants how to determine all possible sources and select the best ones. The next stage is location and access, where students learn how to locate sources and find information within them. Use of information focuses on engaging and extracting relevant information from the source. The last two stages are synthesis and evaluation. Synthesis helps to determine how to organise sources and present the information, while evaluation review focuses on how to judge effectiveness and efficiency of the overall project and the process (Eisenberg 2006). “The Big6 Skills are applicable to all subject areas across the full range of grade levels. Students use the Big6 Skills whenever they need information to solve a problem, make a decision, or complete a task” (Eisenberg 2006).

2.1.1.1: Target audience

The target audience for this course are individuals doing research at the UM. As identified in the User Needs survey of 2016, UM students expressed a lack of understanding and awareness when it comes to Library resources and basic research skills. There is a huge gap between what students are taught in high school and what they are expected to know when they enter University. Lanning and Mallek, (2017) conducted a study on college students to identify factors influencing IL and they found that the majority of students entering college do not have the necessary IL skills to meet the demands of the college-level course work they will require to do. In 2009, Alison Head and Michael Eisenberg carried out a survey asking college students how they find information and conduct their research. The results showed that indeed, the majority of students knew how to search for the information; however, most of them were limiting their searches only to a narrow amount of sources that are already familiar to them and easily accessible (Head & Eisenberg, 2010). It was also noted that students were eagerly conducting searches on-line and using their course readings, but they were quite resistant when it came to asking librarians for help. Most of them were familiar with or knew how to find information for their assignments; nonetheless, they often experienced an information overload and frustration due to lack of planning, procrastination and no ability to evaluate their findings (Head, Eisenberg 2010).

“In general, students reported little information-seeking solace in the age of the Internet and digital information. Frustrations were exacerbated, not resolved by their lack of familiarity with a rapidly expanding and increasingly complex digital information landscape in which ascertaining the credibility of sources was particularly problematic” (Head, Eisenberg 2009).

Gross and Grotti (2013) point out that even ‘digital natives’ do not enter postsecondary educational contexts with sophisticated information searching or information evaluation skills. According to Bates (2003), students are more likely to use the principle of least effort in their information seeking behaviour.

This means that students use information they know to be of poor quality and less reliable, so long as it requires little effort to find, rather than using information they know to be of high quality and reliable, though harder to find.

This can also be the result of the context for seeking information requires disposable information, which is foreseen by individuals as information required only once, or for a single task, unlikely to be repeated (such as assignments and exams) (Mawby, Foster, Ellis, 2015). In 2006, Scoyoc and Cason discussed how the underutilization of library databases continued beyond first year students through all undergraduate classes served as an indicator of low IL skills. Furthermore, Becker (2009) talked about students who are familiar and visit the library but still do not know what search tools exist or reject them because they perceive them to be more difficult to use than Google.

A National Literacy Strategy for all, in Malta and Gozo does not mandate schools to incorporate IL skills in their curriculum.

“The overall purpose of the National Literacy Strategy for All is to promote and enhance lifelong and lifestyle, high quality literacy practices among children, youths, adults, third country nationals and persons with learning difficulties. It strives also to improve literacy outcomes, resulting in inclusive practices, higher educational qualifications, and better job prospects” (Ministry for Education and Employment 2014).

IL is not the priority and there is no clear instruction on what skills students should acquire before entering University that is why the course is designed to target the needs of individuals with basic IT knowledge but with no further research skills.

2.1.1.2: The Workshop Outline

The workshop is designed for UM students of all subjects and any year. Each session takes up to 2 hours with ample time to explain and put into practice the 6 basic skills of Eisenberg's model. This workshop is based on the Big6 model of information skills. "It takes students through a range of steps from identifying why they need information (task definition) to reflecting on how well they have used the model (evaluation)" (Herring 2011). It will help students to learn the various skills that will be essential for their future. The whole workshop incorporates both, theory and practice. The sessions are held at the IT services training rooms since they are equipped with computers for each participant. This allows each participant to practice the Big6 IL skills during the lectures and also allows the librarians to use library resources as testing grounds for these skills. Sessions are open for up to a maximum of 20 participants. At the end of the course, the students fill in a questionnaire to share their feedback regarding this teaching programme and marketing strategy, the latter aimed at identifying the right/best channels to promote library services to students.

During the IL Workshop, librarians will teach specific IL skills, starting the session with a practical example and a research question. The question is used to help students to identify their need for information and to define the information task (15 mins). After identifying the information needed and what is required to find relevant material, the librarian shows attendees how they can conduct different searches using Boolean Operators on various platform including Google Scholar and Hydi (30-40 mins). Following this, students are asked to locate and access resources using one of the previous search strategies in order to find and use resources as an example for the following stages. During this time, the Librarian will guide students to use databases available through Hydi in order to highlight the importance of the scholarly databases (20 mins). Identifying a relevant source of information requires students to evaluate if said source is relevant to their initial research question and the task defined in the beginning of the session. Librarian and students will discuss what to pay attention to in order to evaluate a source and how to properly use, through citing and referencing, the resource in question.

This will also include a short example of synthesizing information in order to draw out conclusions, arguments, theories, etc... from different resources (30 mins).

2.2: Marketing of Academic Libraries

Providing new services and products is not enough. In order to effectively reach UM students and make them aware of the Library service, including the new IL workshop, the UML needs to better understand its patrons and develop a marketing campaign that will reach said students. Through marketing the UML will be able to communicate with its patrons and provide a service which caters for their needs and at the precise moment when they need it most. As a result, marketing and promotion of the UML IL workshops, is as important as delivering the workshops. Nims (1999) argues that the main focus of every library is customer service, which is another term for marketing. Similarly, Martey (2000) explains how effective marketing provides the means by which users are made aware of the services of the library and their value. What is the point of providing a new service or product if nobody knows about it or knows how to use it?

Today more than ever, academic libraries need to be able to market their services and promote themselves as a tool for research. Libraries are spending their annual budgets and resources on products or service that require patrons to make use of them. If nobody is aware of a particular services, even though it might be what the patrons need, there is a likely probability that the service will be discontinued. This will benefit no one and results in an inefficient library service. De Sâez (2002) discusses how significant sectors of the potential market for the library or information center's services are probably not aware of all the services available or have no understanding at all what is offered. Ajileye-Laogun (2004) talks about "how people thought of librarians as "trained" or "skilled" but not necessarily as "professionals" and have no idea of the qualifications or training requirements to be a librarian." Subsequently, with the rise of the fake news epidemic, many students find it even more difficult to conduct their research. This is especially so with students who lack IL skills and find it hard to ask for assistance.

Researchers have a vast selection of tools and information resources available at their disposal and with limited information on how to use or access certain resources, the researcher's information needs may not always be successfully met; thus they might settle for resources, which are inferior and/ or are not authoritative. As a result academic libraries need to have a more visible role on campus in order to assist or even educate university students about library services but also help them acquire IL skills. Even though the acquisition of IL skills is different from being aware of Library services, academic libraries can utilize IL workshops to increase awareness of other Library services. Students can acquire IL skill by attending IL workshops, however, by increasing the library's visibility not only will student be informed of the IL workshops and probably attend them, but they are more likely to be aware of other services the library provides, especially if these services are referenced during IL workshops. In order for libraries to increase their visibility, they need to adopt different marketing strategies and conduct market research of their patrons. Gupta, (2006) explains that academic libraries need to understand the importance of satisfying patron's needs, which does not focus on just promoting a service but guaranteeing that the user's needs are being catered for.

Students have a tendency to associate the library brand with books instead of the rich information resources and services (Si, L., Chen, B., & Hou, J., 2009) and they have little awareness of alternative ways to find information or, after trying other methods, still prefer to use Google (Googling phenomenon) (Rosa, Cantrell, Hawk, & Wilson, 2006). Patton (2002) also explains how 75% to 85% of college freshmen viewed the library as a scary, overpowering and confusing place. This is fundamentally an image problem, which academic libraries struggle to change. Patton (2002) continues with the need of librarians to develop the ability to create a welcoming environment and be able to build confidence in the students. Utilizing a number of marketing and promotional campaigns libraries can help develop a brand/image of a library that is welcoming, and that librarians are approachable and ready to help.

In today's technological age and information overload society, libraries seem to be in a constant battle with the Internet. As a result libraries have to find new ways to make patrons aware of their services and their relevance as a means to get accurate and reliable information. Herron (1997) argued that, due to the increase of a ... "competitive environment, our program services must be more marketing sensitive and purposeful today". According to Siess (2003), marketing is vital to the success and continued existence of a library. Libraries need to understand their clients' wants and needs, the environment in which they operate, their resources and strengths, and the social factors which influence their clients (Ewers, B. and Austen, G., 2004). Coote (1994) also suggested that in today's business environment, Librarians who take marketing seriously will earn "street cred" in their organization. This "street cred" is important when libraries need to communicate with their patrons. Through effective marketing, the academic librarian can promote the resources available and guide users to what relevant information they require for their research needs (Cox Norris, 2005).

Cox (2005) continued to emphasize that marketing for libraries means; developing tools to determine what services users wants, in the form of surveys or feedback forms, user needs reports, etc... Then develop, package, and promote services that fill the needs gap in a way that will entice users to use the library effectively. In order to efficiently provide services to patrons, libraries need to manage their costs accordingly. This means listening to users instead of spending money on service that users do not need or want. Library costs are constantly increasing and thus academic libraries need to justify their costs by how much users are using their services. Through marketing a library can identify the right services/products its patrons needs and thus shift costs to the right services or create new ones. If patrons do not know about a service they are not using it and thus a library might be paying for a service for nothing. Marketing has become so crucial for academic libraries that in 2003, ACRL provided a toolkit for librarians to help promote their libraries across campuses and communities to better market their services on-site and online (ACRL, 2003).

According to Matthews, in the early 1970's, the term social marketing emerged to raise awareness of social issues and to encourage social change, however, with the evolution of the Web and particularly with the interactivity of Web 2.0, social marketing has morphed from a description of content in order to promote or sell, into a communication method. Cox (2005) provided an example of this by outlining how vital a role the interaction between library staff on a service desk and patrons, contributed towards the marketing of the library as a brand. When librarians teach users how to use a service or resources, they are in essence promoting that particular service and the library itself thus creating a relationship between library and user (Cox Norris, 2005). Furthermore, Ashcroft & Hoey (2001) described these interactions as opportunities used to enhance or change the image, perception and status of the organization. Social marketing provides a platform for effective communication thus raises the profile of an institution - through the promotion of new initiatives, through a change or improvement of image (towards modern, dynamic, imaginative, fun, proactive) and through improving or enhancing customer service (Ashcroft & Hoey, 2001).

According to Lucas-Alfieri (2015), librarians have often viewed marketing as a series of tactical events or tasks, instead of the creation of a strategic planning process. This is similar to "reactive marketing", where Librarians often start marketing toward the actual end of the process, with promotions, the activities that inform library constituents of new services, resource or events. This also means that the library is reacting to a perceived need and most often than not, promoting something the library thinks, its users need. Instead, libraries need to think more about setting up a marketing plan and not just settle on promoting particular services. Developing a comprehensive marketing plan starts by understanding your audience and market segments. This can be done in the form of market-research and user based surveys which assess the needs of patrons and identify any gaps in the library's mission and vision.

Brinkman and Weinstein, (2008) wrote about how library collaborations with campus cultural events that get students, faculty members and administration staff involved as a community create opportunities to market activities, which successfully link all stakeholders involved in one event/goal.

This correlates directly with the image of the library, which helps to cultivate awareness of new products and on-going services. Brodsky, (2003) demonstrated how the Sonoma State University Library used a variety of channels and marketing tools such as campus newsletters, the student paper and the library website for an effective and successful marketing campaign. These are all good strategies in order for a library to infiltrate the student community and have a more active role in campus life. These examples further highlight the salient need for libraries to conduct SWOT analysis so that they can effectively examine their Strengths (internal), Weaknesses (Internal), Opportunities (External) and Threats (External) and subsequently determine the best ways to identify potential users, reach said users and promote how their library services can meet such user needs. (Smith, 2011).

2.3: Defining Marketing

Unfortunately, to this day, marketing is still linked to selling and the pursuit of sales, rather than customer satisfaction (Gupta, 2003). However, selling is only a part of a bigger overall business strategy an institution can adopt to make a profit. Marketing is a mixture of principles that involves collecting information, planning, understanding customer needs, communication and forecasting new trends. For a non-profit organization such as a library, marketing does not simply refer to the advertisement of its services.

According to the American Marketing Association, “marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and the society at large” (American Marketing Association, 2014). Marketing is the management of the four elements called the 4 P's of marketing. This involves a process through which goods and services move from concept to the customer. The 4 P's of marketing include the coordination of:

- Identification, selection and development of a Product,
- Determination of its Price,
- Selection of a distribution channel to reach the customer's Place, and
- Development and implementation of a Promotional strategy (Business Dictionary, 2015).

One issue with library marketing is that most often, libraries focus only on the promotion aspect and ignore the other principles of the four Ps of marketing (Product, Promotion, Price, Place) (Biggs and Calvert, 2013). Doherty's survey (1995) showed that promotion is usually the only form of marketing carried out. Many libraries find it difficult to apply the other principles to the library environment. There is a tendency to dwell solely on lending and referencing services ignoring other aspects of the library that patrons enjoy, such as library space to hang out, Wifi facilities, different activities organised at the library, etc... This shows how varied the 'Product' of the library actually is. As a result libraries need to develop extra strategies to promote different services to different market segments. Libraries also need to understand the importance of awareness vs knowledge about services. Marketing a service does not mean knowledge on how to use said service. Students might be aware of a particular service but clueless on how to use it. Making such a distinction can inform libraries and help them develop different marketing strategies for different products. Since user's fees are practically non-existent in academic libraries (as access is given through a study module or course), it is often common to ignore that 'Price' also relates to the cost of providing/supplying the service/goods. This can translate to opportunity costs or the worth to users in terms of time to get to the library, learn the system or use the service (Rossiter, 2008). However, in the case of academic libraries, Kotler's four Cs seem more relevant. (Mazur, 1991/1992). Product becomes the Customer, Place turns into Convenience, Price is the Cost to the user and Promotion translates to Communication (Ashcroft & Hoey, 2001).

Dr. Philip Kotler describes marketing as “the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit.” Through marketing institutions can identify and target unfulfilled needs and desires of particular users. Marketing defines measures and quantifies the size of the identified market and the profit potential. Moreover, it allows the company/institution to determine which departments/products are providing the best services while designing/creating/implementing new products and services to promote accordingly. The marketing’s key processes are:

- Opportunity identification
- New product development
- Customer attraction
- Customer retention and loyalty building
- Order fulfillment

A company that handles all of these processes well would normally enjoy success. But when a company fails at any one of these processes, it would not survive (Kotler Marketing Group, 2012).

Academic libraries should proactively market their services using targeted communication strategies aimed at establishing an emotional and interactive connection with users (B. Matthews, 2009). This means that academic libraries have a necessity to meet the user’s needs, such as the faculty and it’s patrons (Lee, 1992). Norris (2005) explains how academic libraries need to market their services as a means to bring non-users to the library, both physically and virtually while also creating more informed users. Cox further elaborates on how users coming to the library, might not necessarily use the resources or collections because they are unaware of them. Thus, libraries need to market their resources, collections and/or services, in order to motivate patrons to utilize them.

Chapter 3: Action Plan for Information Literacy Workshops

As discussed in the sections above, academic libraries need to take marketing seriously in order to effectively deliver a service. This research will look into the best times to organise and market introductory IL workshops through the academic year 2018-2019. As a result, a marketing plan for these workshops was developed.

3.1: User Needs

Following a 2016 survey and the user needs report, which the UML was responsible for, it was discovered that a large portion of the library patrons either do not use or are not aware of the library's electronic resources. The survey pointed out that undergraduate students lack awareness and IL skills while postgraduate students and academics need assistance when it comes to browsing databases and conducting in depth research. This means that undergraduate students tend to show lack of awareness and knowledge about library services whilst postgraduate students and academics know about service but do not know how or why they should use them. As a result, both undergraduates and postgraduate students do not use the proper channels of information retrieval for academic research. Students and some academics found it easier to do research for assignments and dissertations using Google and the web in general.

Even when using other tools for searching, it was evident from the survey that students lack knowledge in creating search strategies and combining keywords with Boolean operators. Respondents of the survey did not even know what the operators even are and also expressed concern when evaluating what they find online. Similarly to what Williamson, Bernath, Wright and Sullivan pointed out in 2008, PH.D. students showed a tendency to use Google first, before library resources. They did not differentiate between different electronic resources (Williamson et al., 2008) and displayed a lack of knowledge of Boolean operators and other search strategies (Bloom and Deyrup, 2013)

In order to effectively cater for the discovered needs, the UML conducted this study to identify the maximum point of engagement from UM patrons and also discover the best marketing techniques to promote these workshops and other services. As a result, to increase the awareness about Library service the UML organised IL workshops with added benefit of instructing participants on how to be information literate and use particular library services. These workshops were also open to academic staff members of the UM, as from the study it appeared that this market segment would benefit from such sessions. Librarians made it a point to instruct academics to guide students to use Library resources as well.

3.2: Mission and Vision

The UML is the main institution at the UM that provides students and researchers with a variety of tools and resources for research. With this regard, the UML has an obligation to teach its users how to become information literate in order to effectively make use of resources and navigate the information landscape. The UML provides patrons with the necessary skills to successfully become proficient in defining information needs, identifying the right resources, use such resources and evaluate the information retrieved.

3.3: Strategic Aims

- Provide IL training to UM students on a regular basis in the form of workshops.
- Increase awareness about Library resources.
- Provide a feedback questionnaire to be filled in after each session in order to assess the attendance, expected outcome, marketing of the IL workshops and ways to improve the workshops.
- Assess the most effective marketing techniques used to promote the IL workshops and identify possible ways to use them for other library services/marketing campaigns.

3.4: Environmental SWOT analysis for providing IL training

The strengths and weaknesses reflect the internal conditions of the UML, while opportunities and threats echo external factors affecting of the UML.

Strengths	Weaknesses
<p>Skilled librarians: Librarians working at the UM Library are already knowledgeable about the skills required to be information literate.</p> <p>Experienced trainers: Outreach Librarians (currently 3 people) have extensive experience when it comes to delivering training sessions. This means that teaching training will not be required.</p>	<p>Additional training: The need to invest in additional staff training will be required to guarantee a solid expertise in IL by at least the head of the Outreach Department. This will aid in the development of the new IL workshops</p>
Opportunities	Threats
<p>Specialised IL training on campus: The UM Library will be the only institution on campus that is providing IL training specifically on using academic resources. IL is offered as a unit to Library and Information Science students and thus it is not open to all students and staff of the UM. The UML is in a position to assert itself as the primary source of IL training enhancing the visibility of the institution and placing the Library in a better position to promote its other services.</p> <p>Promoting additional services: By providing the IL sessions, more University patrons will become aware of the library's services and this will in return increase the chances of collaborating with different departments to deliver or promote additional services.</p>	<p>Increased demand: The information and literacy training can become so popular that the Outreach Librarians alone will not be able to handle it. This will require investing in additional staff and training to expand the pool of human resources available at the UML to provide this service.</p> <p>No demand: On the other hand, demand for such training might be coming from a small group of students/academics or be only popular during the first months of the academic year. Thus additional marketing of these workshops will be needed together with an awareness campaign for IL skills.</p> <p>Specific skill deficiencies: Provided the number of students enrolling at the UM will increase, this might require the IL session to evolve into more advanced workshops. This would require the Outreach Librarians to receive further training.</p>

The strengths and opportunities observed for the implementation of the IL sessions far outweigh the threats and weaknesses. The Outreach Librarians are ideal candidates to deliver these sessions since they already possess the necessary skills and training to teach IL. Additionally, professional training can further be given to the head of the department to assist with the development in more detail of these sessions. Moreover, the Outreach Librarians are already involved with the promotion of the library services and are the main customer care librarians that handle telephone and email queries. Delivering these sessions will eventually sharpen their skills in answering questions related to IL and give them the opportunity to market other resources to a wider audience.

Furthermore, the threats identified are transferable to other departments and services currently offered by the UML and as such are not only present for this service but are a reality that the Library will have to overcome in the coming years.

3.5: Training

Training about IL was provided to the Outreach department in the form of a short course offered by the Media and Knowledge Science Department from the University of Malta. The short IL course was organised during the months of May and June 2018 in preparations of the next scholastic year starting October 2018. Following this training the outreach librarians developed a 2hrs IL workshop utilizing skills from the Big6 model developed by Eisenberg and Berkowitz.

3.6: Pilot session

The Outreach Department delivered a pilot IL workshop to selected service point staff members of the UML. This session offered insight into ways to improve the delivery of the workshop while also provided feedback on the content for the workshop. Additionally, this session was beneficial to front desk staff members in order to assist with any queries students might ask them.

3.7: Scheduling of sessions

Four IL sessions each month were organised starting from November 2018 till April 2019. The sessions were scheduled at different times and days as to maximize attendance across different months. No sessions were organised during the exam period months of January and June as events/workshops during those periods tend to have very poor attendance. The workshops were held at the UM IT Services department so as to offer attendees the possibility to follow using an IT workstation. This allowed the librarians to use the UML tools when teaching IL skills. As a result, the promotion of other library services and research tool was seamlessly incorporated in the IL workshops. The librarians also had the opportunity to ask any questions, about either IL and/or the Library resources, on the spot.

3.8: Marketing

In order to reach most students at the UM, a generic email was sent to all students (all years of study) through the Registrar office. The emails promoted the new IL workshop and included instructions on how to book for the session. Academics were also sent the same email with additional information to forward the news to their students. This was done every two months as not to spam UM patrons. The sessions were also promoted on the Library's Facebook page and the UML's webpage on a regular basis, with additional IL tips and information to help promote the importance of the workshops. A poster was designed to promote these sessions and made visible on each faculty's notice board (including the library one). The poster was also visible on the UM's Newspoint (electronic portal of new activities at the University), including several monitors spread throughout campus.

In the feedback questionnaire attendees were asked to point out from where they learned about the IL workshops. As a result students who attend the workshop will highlight the marketing technique that works and the library can therefore focus more on using/improving said marketing channel.

3.9: Budget

3.9.1: Training

The Head of the Outreach Department had already completed a 2 month course about IL. The course provided all the necessary skills and knowledge needed to become proficient in the subject and also develop the proposed IL training workshop. The short course was provided by the University of Malta Media and Knowledge Science Department free of charge. The course included a 2hr session each week for 2 months. Since these sessions were organised during working hours, the time spent during these lectures was included in the overall budget for the IL workshops for students.

Following is a breakdown of the total cost of the librarian participating in the 2 month long IL course:

- Time spent participating in the sessions of the course = 2hrs a week for 2 months =

$$2\text{hrs} \times (4 \text{ weeks (1 month)} \times 2 \text{ months}) = 8\text{hrs}$$

- Salary of Outreach librarian = 19,738* Euro per annum
- Salary of Outreach librarian per month = $19,738 / 12 \text{ months} = 1,644.83 \text{ Euro}$
- Salary of Outreach librarian per hr (working a 40hr week) = $1,644.83 / 4 \text{ weeks} = 411.21 / 40\text{hrs} = 10.28 \text{ Euro per hr}$
- Total cost of outreach librarian participating in the IL course = $10.28 \text{ Euro} \times 8\text{hrs} = \mathbf{82.24 \text{ Euro}}$

**Reference is made to the latest active collective agreement available from the University of Malta*

3.9.2: Research

All three members of the outreach department were responsible for developing the IL workshop together with researching various marketing techniques for promoting services in an academic library. This required librarians to spend an additional 2hrs a week to conduct research and set up meetings with management to develop the IL workshops. This was done during the summer months of July, August and September in preparation of the scholastic year 2018-2019

Cost of research and meeting with management for the development of the IL workshops can be calculated as follows:

- Time spend on research = 2hrs a week for 3 months =

$$2\text{hrs} \times (4 \text{ weeks (1 month)} \times 3 \text{ months}) = 12\text{hrs}$$

- Cost of 3 outreach librarians conducting research for 1 year = $10.28 \text{ Euro} \times 12 \text{ hrs} \times 3 \text{ librarians} = \mathbf{370.08 \text{ Euro}}$

3.9.3: Delivery of Sessions

It was observed that during the months of October, November and December 2018 the team took about 1hr a month to schedule all the Library sessions and workshops for that particular month. As a result, this was taken to be the cost for organising and scheduling the four sessions a month for the new IL workshops. Here the cost of delivering four 2hr session a month was also included.

- Time spent scheduling sessions for a scholastic year (November-June, excluding exam months - January and June) = $1\text{hr} \times (8-2\text{ months}) = 6\text{hrs}$
- Cost for scheduling sessions = $6\text{hrs} \times 10.28\text{ Euro (hourly salary of librarian)} =$
61.68 Euro
- Time sent delivering four 2hr sessions each month for a scholastic year (excluding exam months - January and June) = $4 \times 2\text{hrs} \times (8-2\text{ months}) = 48\text{hrs}$
- Cost for delivering the IL sessions = $48\text{hrs} \times 10.28\text{ Euro (hourly salary of librarian)} =$
493.44 Euro
- Total Cost of organising and delivering four 2hr IL sessions for an academic year (excluding exam months - January and June) = **61.68 Euro + 493.44 Euro = 555.12 Euro**

3.9.4: Marketing

The UML promoted the new IL sessions and other services offered to the UM patrons using various channels. These included periodically sending emails to UM staff and students, designing posters and social media posts, word of mouth marketing and working with other UM and students' organizations. This required the outreach librarians to use the research conducted from the summer months and put it into practice. As a result, each outreach librarian spent at least 2hrs a week on marketing alone. Marketing is a yearly ongoing task and as such the costs were calculated for a period of 9 months (length of a scholastic year).

- Cost of marketing for 9 months = 10.28 Euro (hourly salary of librarian) x 2hrs of marketing related work for 9 months (36 weeks) = **740.16 Euro**
- Total cost of marketing = 740.16 x 3 outreach librarians = **2,220.48 Euro**

Additionally a Marketing supplies budget of 100 Euro a year, was allocated for any costs related to the promotion of services that included printing, office supplies, and other materials used to create promotional material. This is funded from the Library's operations budget.

3.9.5: Venue

The IT Services department offers a number of fully equipped IT labs suitable for the planned IL training sessions. Since the IT Services offers the use of these labs to UM entities such as the UML, free of charge, this saved additional funds from the Library's expenditure.

3.9.6: Total Costs of Strategic Plan

- Training = **82.24 Euro**
- Research = **370.08 Euro**
- Organising and delivering the IL sessions = **555.12 Euro**
- Marketing = 2220.48 + 100 (Marketing supplies) = **2,320.48 Euro**
- Total Cost = **3,327.92 Euro**

The UML's budget for organising, delivering and marketing new IL sessions is **3,327.92 Euro**

Chapter 4: Methodology

4.1: Introduction

Research methods aid researchers in structurally collecting data in order to be studied and analysed. The commonly used research methods fall under two different approaches; qualitative and quantitative. Qualitative research methods tend to focus on the quality of the data gathered. This means qualitative data's priority is to collect experiences rather than statistical numbers. According to Bryman (2012), this usually is adopted in the form of an interpretivist approach, meaning that, the aim of the data is on the understanding of the social world through an examination of the interpretation of that world by its participants and not a collection of data sets.

“Quantitative methods, on the other hand, can be defined as the objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques” (University of Southern California, 2019).

It can also be described as entailing the collection of numerical data, as exhibiting a view of the relationship between theory and research as deductive and a predilection for a natural science approach and as having an objectivist conception of social reality (Bryman, 2012).

For complex research questions a combination of both research methods can be used. Mixed research methods focus on research questions that call for real-life contextual understandings, multi-level perspectives, and cultural influences. This style of research employs rigorous quantitative research, assessing magnitude and frequency of ideas/theories and meticulous qualitative research exploring the meaning and understanding of such ideas/theories. This method utilizes multiple methods (e.g., intervention trials and in-depth interviews, questionnaires and attendance sheets, etc...) and it intentionally integrates or combines these methods to draw on the strengths of each (National Institute of Health. 2015).

In order to review the effectiveness of the strategic plan, two types of data were collected. The booking and attendance for the IL workshops and data from an anonymous questionnaire filled in by students after each IL session.

4.2: Quantitative

Statistics from the attendance and number of sessions organised through the academic year were collected and analyzed. This information was crucial to identify ideal dates/periods for scheduling of the workshop and provide clues as to trends of attendance due to assignment, exams, festivities, etc... This information provided the Outreach Department with a better understanding as to when to organise the sessions for the future while also particular periods where a more intensive marketing campaign was needed.

The level of study of the students attending the workshops was also recorded. This data offered Outreach Librarians insight into what year of study (1st to final year of the course), students make use of research skills. This information can be used by the librarians to develop future in depth IL courses together with faculty course coordinators and integrate the IL workshop as mandatory course work.

The research population for this quantitative research includes all patrons of the UM. This can be classified as follows:

- Academics
 - Full-time
 - Part-time
 - Visiting Lecturers
- Support Staff
 - University Staff (Administration)
 - University Staff (Faculties and Departments)
 - Library Staff
- Students
 - Full-time
 - Undergraduate
 - Post-Graduate
 - Part-time
 - Undergraduate
 - Post-Graduate

4.2.:1 Data collection

In order to collect data pertaining to the attendance of the IL workshops both bookings (emails, phone or in person) and attendance of the workshops were recorded (Table 3, 4A and 4B). Data from the questionnaire pertaining to the IL sessions and marketing was collected and analyzed in tables in an Excel sheet (Table 5-16). Furthermore, additional demographic data was collected through the questionnaire (Table 17-20).

4.3: Qualitative

Qualitative research methods focus on observing patron behaviors, attitudes and opinions so that we can understand why they behave the way they do, and to discover what they want us to deliver. This information is presented in anecdotal terms, unlike quantitative research, which presents findings numerically (Lucas-Alfieri, 2015). A qualitative questionnaire (Feedback Sheet) is a good way to assess whether their needs have been met by attending the workshop. This questionnaire will be distributed and filled in at the end of each session by participating students. The questions in the feedback sheet will also help librarians identify better time periods and slots in the academic timetable to organise similar workshops in the future.

Subsequently, the feedback from the close-ended questionnaire will also be used to assess the effectiveness of IL sessions and to identify any changes that need to be made to the structure of the sessions. This provided the UML with immediate feedback with regards to the quality of the sessions. Furthermore, the questionnaire provided additional information with regards to the preferences of the students when it comes to receiving information about the library's resources and services.

4.4: Questionnaire

The questionnaire was distributed to IL session attendees after the session. The use of the questionnaire allows for both qualitative and quantitative data to be gathered at the same time. For this reason, the questionnaire was divided into three sections. Section A includes questions relating to IL skills and the IL sessions organised by the UML, while section B includes questions related to how the participants learned about the IL session and which marketing tools they would like the library to use in order to reach them. Section C collects demographic data, which is useful to identify the market segments attending the IL sessions. The combination of the collected data allows for the identification of the best time periods for the library to organise similar session in the future, as attendees highlight in the questionnaire their preferred time for attending similar workshops. This, combined with the statistical data of attendance, informs librarians on the most effective marketing tools to use in order to promote the library's services. Additionally, the questionnaire gives feedback on the IL sessions and points out whether more in depth workshops should be organised by the UML. A copy of the questionnaire is attached in the Appendix.

4.5: Justification of Approach Selected

For the purpose of this research a mix method approach was used to gather data. Since the objectives of this study require the identification of the best period to organise IL workshops, and at what level of study is the IL workshop most beneficial to students, statistical data was collected. While in order to obtain data pertaining to the best marketing practices, a feedback questionnaire was used and filled in by participants after each session. Other forms of qualitative research methods such as interviews and focus groups studies were not considered for this research as these would not provide the necessary data. Interviews with a sample audience would only provide personal preferences of individuals with different needs on a small scale. These interviews might also be inaccurate as verbal assessment of ideal periods where students are willing to attend workshops might vary when it comes to actually booking and attending UML workshops.

Since the UML wants to investigate the point of engagement with patrons on a general scale it is more useful to assess the data naturally without any biases by recording and observing actual booking and attendance data across the academic year.

Questionnaire surveys that are completed anonymously offer frank and honest data. This reduces administrator biases, which can include leading answers, or rephrasing questions such that the meanings change. According to Powell and Connaway (2010), this type of survey eliminates variation in the questioning process. As such traditional formal focus groups as a means to gather data were also considered as not valid for this research. Instead the booking and attendance for each session as quantitative groups give the UML a clearer picture as to the period students are more likely to attend workshops. The questionnaire also provides an anonymous way for participants to address the level of knowledge provided with each IL session.

4.6: Limitations

The main limitation of this study was the scope of the research and the demographic limitations of the UM. Compared to other Universities, the UM caters to a small number of patrons. This means that any sample size for the research will be small compared to other studies. Similarly this study is unique in nature as it will reflect the country and student's population unique attitudes to research. Additionally a limitation to consider is the student's attitude and psychology. UM students have a tendency to not be very engaging and interactive during their studies at the UM. This can be the result of the fact that Maltese students do not pay to attend the university and thus take research for granted. On the other hand, international students, who have to pay to attend courses, are more demanding and interested in all the services their course fees are paying for.

Another limitation of this study was the fact that only workshop attendees filled in the questionnaire and no data could be gathered from students who wished to attend the workshops and couldn't. Also, a greater depth of information could have been gathered if the questionnaire was part of a private interview so as to guarantee a more personal experience and elicit more in-depth and honest answering of the questions asked.

During the month of October no workshops were organised since students are still settling in and probably facing an information overload. As a result, in order to effectively gauge the marketing and usefulness of the IL workshops promotion of the workshops started from the first of November with the first scheduled workshops organised starting from the 2nd week of November. No workshops were organized during the months of January and June since these are considered exam periods. From previously organised sessions by the library, it was observed that due to the tendency for students to focus on preparing themselves for exams, attendance during these months is very poor. Also scheduling for the workshops was limited due to availability of the IT Labs in IT Services.

4.7: Pilot Session

In October 2018, a pilot session was organised and delivered to a group of 15 librarians in order to gather feedback about the session. The librarians participating in the session included some new recruits, which was ideal in order to gather unbiased comments and assess the effectiveness of the session. The questionnaire was also given to the participants after the session in order to gauge and correct any unclear questions. As a result of the pilot session, minor details of the session were amended and optimized, but overall everything remained the same. From the answers to the questionnaire, it was noted that participating librarians responded positively to the session. New librarians were very satisfied with the general scope of the session; however, more experienced librarians suggested a more in depth approach to information literacy, maybe spread across a number of sessions.

4.8: Schedule of Sessions

The total 24 sessions of the IL workshop were scheduled as follows:

Semester 1

Table 1	November 2018	December 2018
AM session	Monday 12th	Tuesday 4th
PM session	Thursday 15th	Thursday 6th
Degree Plus Hrs*	Wednesday 21st	Wednesday 5th
Degree Plus Hrs*	Friday 23rd	Friday 7th

No sessions could be planned during Christmas recess 2018 (21st December 2018 till 7th January 2019)

Semester 2

Table 2	February 2019	March 2019	April 2019	May 2019
AM session	Thursday 7th	Tuesday 5th	Monday 8th	Monday 6th
PM session	Monday 18th	Thursday 21st	Tuesday 9th	Thursday 9th
Degree Plus Hrs*	Wednesday 13th	Friday 15th	Wednesday 10th	Wednesday 15th
Degree Plus Hrs*	Friday 22nd	Wednesday 27th	Friday 12th	Friday 24th

* Degree Plus Hrs are held every Wednesday and Friday from 12:00-16:00
No sessions could be planned during Easter recess 2019 (15th April till 26th April 2019)

Chapter 5 : Data Analysis

5.1 : Attendance of Sessions Data

Following is the total number of bookings for the IL workshop together with the actual attendance during said workshops. A total of 328 students booked for the workshops; however, only 282 students actually attended the workshops. A total of 46 students booked for the workshop but never showed up.

Semester 1

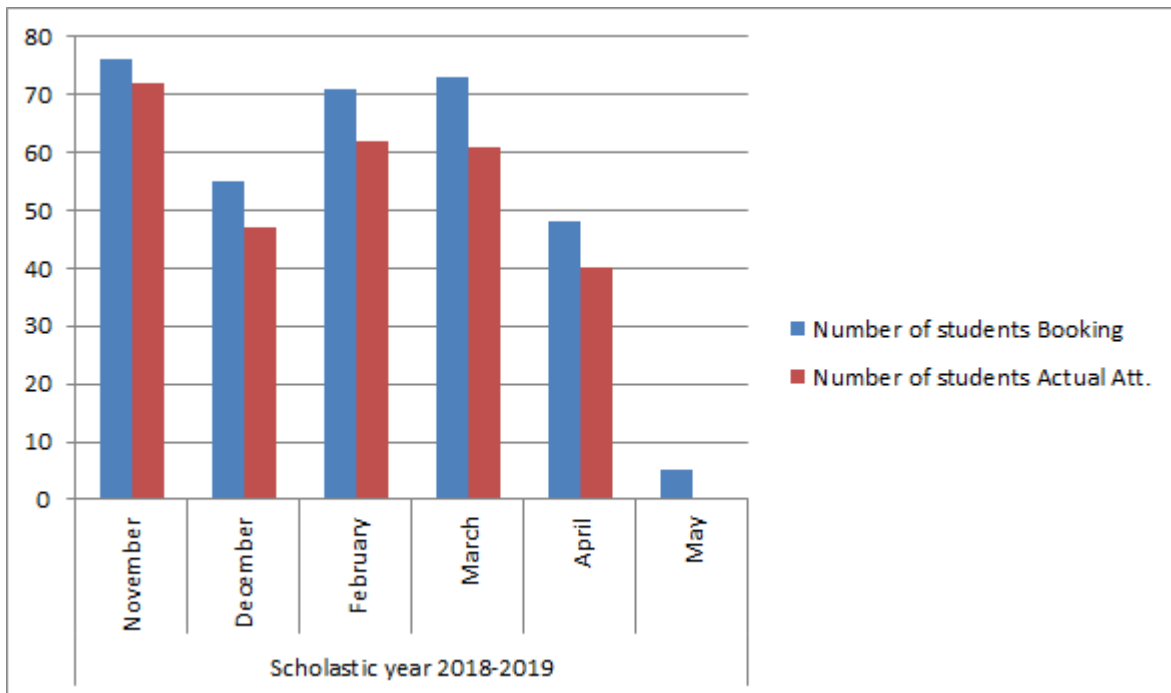
Table 3	November	Booking	Actual Att.	December	Booking	Actual Att.
AM session	Monday 12th	20	20	Tuesday 4th	19	15
PM session	Thursday 15th	20	19	Thursday 6th	9	9
Degree Plus Hrs*	Wednesday 21st	19	16	Wednesday 5th	16	13
Degree Plus Hrs*	Friday 23rd	17	17	Friday 7th	11	10
Totals		76	72		55	47

Semester 2

Table 4A	February	Booking	Actual Att.	March	Booki ng	Actual Att.	April	Booking	Actual Att.
AM session	Thursday 7th	20	20	Tuesday 5th	20	17	Monday 8th	12	11
PM session	Monday 18th	19	20	Thursday 21st	20	18	Tuesday 9th	14	10
Degree Plus Hrs*	Wednesda y 13th	18	14	Friday 15th	15	8	Wednesday 10th	7	7
Degree Plus Hrs*	Friday 22nd	14	8	Wednesday 27th	18	18	Friday 12th	15	12
Totals		71	62		73	61		48	40

Table 4B	May	Booking	Actual Att.
AM session	Monday 6th	2	0
PM session	Thursday 9th	3	0
Degree Plus Hrs*	Wednesday 15th	0	0
Degree Plus Hrs*	Friday 24th	0	0
Totals		5	0

The graph below shows the total number of booking and actual attendance for each month during the scholastic year 2018-2019.



As can be seen from the graph above, November was the month with the most bookings and attendance, while March and February were the second and third months respectively. This data suggests that at the beginning of the academic year students are more interested and thus more likely to attend workshops organized by the UML. Similarly, February and March signal the start of the second semester and students are more likely to participate in IL workshops. In December and April, due to a relatively short months (Christmas festivities/recess and Easter recess) students' attendance drops significantly. In May most students are already preparing for their end of year exams and thus are only focused on that. As a result even though the library had a number of bookings for the workshops, none eventually showed up for the sessions.

5.2: Questionnaire Data

After each workshop attendees were asked to fill in a short questionnaire before leaving in order to gather feedback for future sessions. From a total of 282 students who attended the workshops only 225 students filled in the questionnaire. This can be a result of either having another lecture starting after the workshop or leaving early. Nonetheless, this resulted in a response rate of 80%, which gave librarians a somewhat accurate understanding of the attendees' feedback.

Following is a breakdown of the three different sections and the percentage response of each question.

Section A: Information Literacy Session Questions

01. How do you evaluate the educational techniques used during the presentation (theory, exercises, brainstorming)? *(Please choose one)*

Table 5	Answers	Percentage
Excellent	12	5.3%
Very Good	57	25.3%
Good	88	39.1%
Fair	49	21.8%
Poor	19	8.4%

The majority of respondents answered positively to the contents of the sessions; however, 21.8% remarked that the teaching techniques were only fair. This highlights a need for the librarians to use more engaging teaching methods to make workshops more appealing to participants.

02. Which of the following could make the Information Literacy sessions more effective? *(Please choose one)*

Table 6	Answers	Percentage
More sessions (short course format)	74	32.9%
More detailed subject analysis but still one session	60	26.7%
Smaller groups	51	22.7%
Less detail	13	5.8%
More practical examples and time to practice	27	12.0%

The answers to question number 2 reflect two different user needs. With only a 6.2% difference from a short course format and a more detailed subject session, the UML should consider addressing two types of users who might be interested in similar workshop. Students who have a very basic understanding of IL but would like to learn more skills with regards to research might be more interested in a single detailed session. On the other hand, students who need a basic introduction to IL require multiple sessions in order to fully grasp certain IL concepts. As a result the UML should offer two types of workshops, one planned across several sessions aimed at a beginner level and a more advanced session as a refresher for more experienced researchers.

03. Do you believe that the knowledge/skills you obtained from attending the Library's Information Literacy Session are : *(Please choose one)*

Table 7	Answers	Percentage
Excellent	14	6.2%
Very Good	73	32.4%
Good	104	46.2%
Fair	29	12.9%
Poor	5	2.2%

With a majority of 46.2%, participants of the IL workshops believed that the knowledge/skills they obtained from the session were good. This does not mean that all participants acquired all the relevant IL skills, as there was no way to test how well participants understood the content of the workshop and how well they would perform unsupervised. Librarians should consider ways to improve their delivery of the workshops for a more comprehensive workshop.

04. When would be the ideal period for students to attend similar Information Literacy sessions? *(Please choose one)*

Table 8	Answers	Percentage
1st term (October-December)	134	59.6%
2nd term (January-April)	86	38.2%
other:	5	2.2%
<i>(all 5 answers submitted in the other category were the scheduling of such sessions during the summer period)</i>		

Most participants highlighted the ideal period for them to attend such workshops during the first semester of the academic year (October-December). This means that the UML should test out the possibility of organising more workshops during said period without neglecting sessions scheduled in the second semester (January-April). To no surprise, no one suggested sessions during the months of May and June, which from the booking and attendance data (Table 4B) show little interest for such sessions during said months. 2.2% of respondents did, however, suggest the scheduling of similar workshops during the summer months. Even though the academic year officially finishes in June, some students working on their dissertations or attending resits might find IL workshops in summer better fitting their schedule.

05. When is the ideal time to organise similar Information Literacy sessions for UM students? *(Please choose one)*

Table 9	Answers	Percentage
Mornings (9am-12pm)	94	41.8%
Afternoons (12pm-4pm)	78	34.7%
Evenings (5pm-8pm)	53	23.6%

Even though most respondents agreed that mornings are the ideal time for the UML to organize such sessions, the Library should take into consideration the students' timetables. It might not be always convenient to organize sessions just in the morning and as such similar workshops should be organized during both mornings and afternoons to give the possibility to students to choose according to their schedule. 23.6% of respondents also highlighted the fact that even sessions would be another time to consider. This mostly relates to part-time students who also work during the day. Evening sessions might not gather a lot of attendance by students but for some it is the only available free slot they might have. Since librarians work office hours (7am-4pm), evening sessions might require further financial costs, however, the UML library should consider scheduling a limited number of sessions in the evening.

06. At what year of study do you think similar IL sessions are the most useful for UM students? *(Please choose one)*

Table 10	Answers	Percentage
1st year of studies	201	89.3%
Middle of the course	19	8.4%
Last year of studies	5	2.2%

With a majority of 89.3%, respondents agreed that the UML IL workshop and similar sessions are most useful during their first year of study. This means that the UML should effectively target first year students when marketing such sessions, and provide more detailed/advanced sessions for returning students. These different audiences might have vastly different queries and/or information gaps and targeting them with separate session might help the students more.

07. In general are you satisfied with the Library's Information Literacy Session? *(Please choose one)*

Table 11	Answers	Percentage
Extremely	25	11.1%
Very	89	39.6%
Moderately	68	30.2%
Slightly	37	16.4%
Not at all	6	2.7%

The overall satisfaction rate of the sessions was quite positive. As a result the UML should continue to schedule similar workshops and improve upon them. This means carrying out quality surveys as a means to keep improving the sessions. The UML should also look into offering different types of workshops that target different user needs.

08. What other topics would you like to see the Library organise?

Only 42 participants (18.7%) wrote down suggestions to this particular question, which can all be summarized to the following:

- Training on Systematic Reviews (17 similar replies - 40%)
- Training on PICO Framework and Question (3 similar replies - 7%)
- Specific Database training (PubMed, Ebsco, ProQuest, etc...) (22 similar replies - 53%)

The answers to question 8 show that specific students have specific needs that the UML can address with future workshops. 40% of respondents showed an interest in systematic reviews which can be a workshop on its own. The 7% who recommended sessions on the PICO Framework are mostly nursing students. As a result the Library can look into the possibility of organising workshops about specific research topics in collaboration with specific departments and/or faculties. With regards to training on specific Databases, the UML can enlist representatives from different databases to provide training to their users. This does not incur additional costs to the UML as such training is freely provided by database providers if the UML subscribes to their databases collections.

Section B: Marketing Questions

09. How did you learn about the Library's IL session? (*You can choose more than one option*)

Table 12	Answers	Percentage
Library Website	35	15.6%
UM emails	128	56.9%
Library's Facebook	43	19.1%
Faculty posters	4	1.8%
Word of mouth	15	6.7%

As seen from Table 12, most students learned about the IL workshop through the sending of institutional emails. However, this might not be the most effective marketing channel as some email might go directly to junk mail folders or can easily be ignored by students. Whilst a very direct form of marketing, UM emails do not guarantee exposure to what the UML might want to market. As a result the UML should consider elevating its online profile to increase its presence on social media.

10. How would you like to learn about future information regarding library services?
(You can choose more than one option)

Table 13	Answers	Percentage
Library Website	21	9.3%
UM emails	149	66.2%
Library's Facebook	39	17.3%
Faculty posters	11	4.9%
Other:		
Twitter	3	1.3%
Instagram	2	0.9%

Respondents of the questionnaire still prefer the use of UM emails for marketing purposes. Nevertheless, the UML should consider other forms of marketing to better engage with different market segments. When it comes to other marketing channels, the Library's Facebook page was the second most preferred method of communicating with patrons. The UML should consider increasing its online presence by creating profiles on other social media platform such as Instagram and Twitter as recommended by some respondents. Utilizing different channels will increase the reach of the UML's communication and encourage patrons to interact with the Library in general. Having said that, and since a huge majority of participants preferred emails as their marketing channel of choice, the Library should send out important messages through student emails but without the possibility of flooding users with a lot of messages. This can result in a general refusal to read or even open emails sent by the Library. A balance should be found as not to annoy patrons with a multitude of marketing emails.

11. How effective do you think does the library use Facebook for promotion?
(Please choose one)

Table 14	Answers	Percentage
Very Good	26	11.6%
Good	116	51.6%
Fair	59	26.2%
Poor	24	10.7%

12. How effective do you think does the library use the website for marketing purposes?
(Please choose one)

Table 15	Answers	Percentage
Very Good	12	5.3%
Good	98	43.6%
Fair	83	36.9%
Poor	32	14.2%

For both question 11 and 12, respondents to the questionnaire said that the Library's use of both Facebook and the Library website was quite good. The UML should not take this as an assurance however, as there can always be room for improvement. Considering that the respondents of the questionnaire suggest that they mostly learned about the workshops through the emails (Table 12) sent to them on their UM account, this can indicate that they might not use the library's website/Facebook as much.

13. How effective are the library's emails sent to students, as marketing tools? *(Please choose one)*

Table 16	Answers	Percentage
Very Good	34	15.1%
Good	105	46.7%
Fair	76	33.8%
Poor	10	4.4%

Most respondents of the questionnaire showed a preference toward emails sent to their UM account and a majority agree that the contents of said emails is good. Since UML emails are quite direct in nature, this shows that UM patrons prefer a more direct approach to marketing.

14. What can the library do to improve its marketing potential?

138 (61.3%) students answered this question with practical suggestions. These can be summarised as follows:

- Library should be more active on social media (36 similar replies - 26%)
- Library should use Twitter and Instagram (9 similar replies - 7%)
- Library should collaborate with student organisations (29 similar replies - 21%)
- Librarians should be more visible on campus (41 similar replies - 30%)
- Library should hire a marketing/graphic professional (23 similar replies - 16%)

The majority of the suggestions recommend the UML to be more visible on campus. This can mean participating in on campus events, even if not directly related to research. Marketing is about building long lasting relationships with customers. By being seen and included with other organization (including student ones) researchers might find it easier to approach the library/librarians.

As a result the UML can benefit greatly by collaborating with other various organizations on campus to indirectly boost its visibility. Another suggestion involves hiring professionals to improve the quality of marketing material issues by the UML. This can be an expensive cost for the UML but has the potential to improve the attitudes towards the institution.

Section C: Demographic Questions

15. User Category

Table 17	Answers	Percentage
ERASMUS exchange student	36	16.0%
Postgraduate part-time student	11	4.9%
Postgraduate full-time student	6	2.7%
Undergraduate part-time student	24	10.7%
Undergraduate full-time student	107	47.6%
Support staff	15	6.7%
Academic staff	26	11.6%

The majority of participants of the UML IL workshops were undergraduate full-time students. Surprisingly, a large number of ERASMUS exchange students also attended the workshops. These students are usually only visiting for a semester. Similarly a number of academic and support staff also attended the IL workshops, which mean that IL skills are seen as an important part of academic life. As a result the UML is catering not only to students starting their scholarly life but also to UM staff and researchers who are on the look out to improve their knowledge and skills. The UML should consider investing more into such courses, especially since there is an interest from UM staff members to attend such workshops.

16. At what point are you in your course?

Table 18	Answers	Percentage
Not applicable	43	19.1%
1st year of course	133	59.1%
Middle of my studies	21	9.3%
Last year of course	28	12.4%

The majority of the IL workshop attendees were first year students who are just starting their studies. This means that most patrons will be more likely to attend such session during their first year rather than later during their studies. The participants who marked as “Not Applicable” are academic and staff members working at the UM.

17. Area of study:

Table 19	Answers	Percentage
Arts, Language and Humanities	39	17.3%
Science	37	16.4%
Medicine and Health Services	62	27.6%
Management, Finance and Accounting	35	15.6%
Architecture and Engineering	21	9.3%
Laws	24	10.7%
Other	7	3.1%

The IL workshop attracted students from all disciplines taught at the UM. The majority of attendees were from the Medical and Health Sciences subjects. Students from the Arts and Humanities, Science, Management, Finance and Accounting had similar participants showing up for the sessions. This means that IL skills are important across all subjects and students attending the UM, regardless of subjects studying feel the need to learn IL skills.

18. Age

Table 20	Answers	Percentage
18-24	72	32.0%
25-34	85	37.8%
35-44	39	17.3%
45-54	27	12.0%
55-64	2	0.9%
65+	0	0.0%

Most participants were under the age of 35 which makes them more likely to be computer literate. This makes it easier to explain and show certain concepts with regards to IL.

Chapter 6: Discussion and Conclusion

6.1: When is the right time for the UML to organise IL workshops?

As can be seen from Table 3, during semester 1, November was the month with the most bookings and attendance of the IL workshops. During the month of December there was a significant drop in both bookings and attendance. This can be attributed to a number of factors but most significantly is because of the Christmas recess (21st December – 7th January). During this period no lectures are organised and students do not find any reason to come on campus. Consequently, students tend to have a very indifferent attitude during this period. On the other hand, during the month of November students are still eager to learn about new services, which can help them through the scholastic year. Since the scholastic year starts in October, a lot of first year students are still discovering what university life entails. Another reason why November is a popular month for organizing workshops is due to the fact that during this month most lecturers start talking about assignment titles and this makes students aware of any assistance they might need.

Semester 2 is the period where students, especially first years, are more settled in and are more aware of what is expected from them. Table 4A shows that bookings and attendance for the IL workshops during the month of February and March were similar to the ones in November. April had a low number of bookings, which can be attributed to Easter recess (15th till 26th April). Also, during the months of April and May students tend to work less on assignments and instead focus more on studying for their finals, which for some subjects start in mid-May and June. This reflects the poor attendance during the May workshops (Table 4B). In total, during the month of May, 5 individuals booked for the workshops in total but none ended up attending in the end.

Looking at the data provided by Table 3 and 4A and 4B, one can come to the conclusion that November, February and March are the months during which students are more willing to attend workshops organised by the Library. This can also be interpreted as students willing to spend more time on extra sessions during the beginning of each semester as they are less busy with other commitments. As Hilde (2015) suggests, timing plays an important role in student's opinion of IL and their further use of library resources. She continues by explaining how even though library instruction with follow-up workshops have proven to be a successful way of improving students' information literacy, the timing of the course plays a large role in the motivation and learning outcome of the students (Hilde, 2015). From Table 8 respondents in the questionnaire also confirm this, as 60% selected the option of having such workshops during semester 1, with 42% (Table 9) preferring such sessions in the morning. It is also important to point out that 89% (Table 10) of the attendees suggest that these kinds of workshops should be offered to students during their first year of study. This reflects the students who actually attended the workshops since 48% (Table 17) of the participants were undergraduate full-time students and 59% (Table 18) were first year students.

6.2: What are best marketing channels and tools the UML can use to reach UM students?

From the answers to the questionnaire filled in after the session, 57% (Table 12) of attendees learned about the IL workshops through emails send to students on their university email. The UML promoted these workshops on the Library's Facebook page and also in faculties with posters; however, these were only effective with 19% (Table 12) and 2% (Table 12) of the workshop attendees respectively. When asked about how students would like to learn about future information regarding library services, 66% (Table 13) still preferred the library to send information through their university email address while only 17% (Table 13) recommended the use of Facebook. Surprisingly Twitter and Instagram where suggested as alternative methods of marketing by 1% (Table 13) of the workshop attendees each.

When asked about the effectiveness of the different marketing tools the library uses to promote workshops/events, attendees responded in a general positive tone, with the use of Facebook, the UML website and emails scoring as good, 52% (Table 14), 44% (Table 15) and 47% (Table 16) respectively. However, it is important to point out that the effective use of all three categories of marketing tools, Facebook, Website and emails were scored as fair by 26% (Table 14), 37% (Table 15) and 34% (Table 16) of the attendees respectively. This indicates that the Library should improve their marketing on all fronts including adopting new ways to increase promotion across students. In fact, answers to question 14 about recommendations by students on what the library can do to improve its marketing include, collaborating with various student organisations either through organising events/workshops together or by cross promoting each other. This can increase the visibility of the library as a whole on campus and also, as suggested in the questionnaire make librarians more engaged with campus life. The library was encouraged by some attendees of the IL workshops to diversify its social media engagements. This means creating account on other platforms such as Twitter and Instagram which have become quite popular with students. As a result the UML should work closely with the UM Communication's Office for a more effective marketing strategy.

6.3: What is the ideal level of information that should be provided during the IL workshops?

Table 11 shows how 40% of attendees for the IL workshops were very satisfied by the library's IL session. On the other hand, 30% were only moderately satisfied with the session, which indicates that the workshop has room for improvement. Looking at the data on how students rated the skills of the librarians delivering the workshops, 39% (Table 5) rated them as good. While 25% (Table 5) rated the librarians' skills as very good, 22% (Table 5) concluded that the librarians' skills were fair. This swing in the data can be a result of having different people giving the same workshop on different days. Librarians are not given any training as educators, even though for the IL workshops outreach librarians were given training about IL skills, the librarians had to rely on their own personal experience when it comes to teaching and delivering sessions. Librarians should also consider active learning as a method where students are allowed to participate in class and practice following their instructor (Burger, 2007). As Lorenzen, (2001) explains, "the role of the teacher is to lecture less and instead direct the students in a direction that will allow the students to "discover" the material as they work with other students to understand the curriculum." Librarians can design workshops to be more in line with hands-on practice rather than traditional lecturing.

Furthermore, 33% (Table 6) of workshop participants pointed out that a more in-depth course in the structure of a short course with multiple sessions would be more effective to teach IL skills. Another 27% (Table 6) suggested more detail in the workshop but still keeping it as one session. Alternatively, 23% (Table 6) of the participants opted for smaller groups and 12% (Table 6) recommended more practical examples and time to practice during the workshop. This data shows how there is a demand for IL workshops but for different audiences, with only a 6% variance between students wanting one session and multiple ones. When asked about the information/skills received during the workshop 32% (Table 7) and 46% (Table 7) of the participants recorded it as very good and good respectively, and only 2% (Table 7) said it was poor. This means that the workshops are a good introduction to IL, however, more in-depth training can be offered for different types of students.

As seen in question 8, some students suggested further training regarding systematic reviews, training on PICO Framework and Question, and training on using specific Databases such as PUBMed, Ebsco, ProQuest, etc... These can be alternative workshops organised by the library for different target groups. Additionally, this reflects the need to include IL into current course modules. Howard (2012), states that “IL should be part of a bigger academic skills agenda rather than standing alone.”

Chapter 7: Recommendations

Hilde (2015) explains how library instruction and information literacy is becoming more and more vital to research and student academic assignments, but only one-fifth of ARL libraries consider teaching a key element of their mission (Oakleaf, 2011). Thus academic libraries, as the primary source for scholarly research to university patrons, should consider teaching information literacy skills as priority and part of their mission statements. The UML already believes in the fundamental importance of having librarians teach students research skill, however, UML librarians need to cater for different patron needs. Even though the IL workshops organised during the scholastic year 2018-2019 were quite successful, from the feedback and the data received, a few recommendations can be drawn out. When it comes to marketing and promotional material, the library should consider hiring a professional graphic artist/designer/marketing person. This will help with creating more appealing marketing campaigns and also manage multiple social media accounts more effectively. The UML should continue to organise introductory IL workshops nonetheless; the library should also look into the possibility to organise more in-depth sessions for researchers who want to do more complex research. These workshops should also be offered at different times with more sessions available at the start of each semester. Some sessions should also be considered for part-time students, which mean offering workshops after office hours.

Furthermore, the library should consider working closely with lecturers and academics, especially those who teach research methods, to include IL sessions using the Library's resources during lectures for the particular module. This can lead to the development of an extracurricular course as recommended by Guise, Goosney, Gordon, & Pretty, (2008). Students would be able to choose the Library IL course as part of their studies and gradually increase their knowledge with regards to IL skills. "Library-led faculty workshops offer excellent opportunities to further a library's collaboration with individual faculty members, academic departments, and other units within the university" (Miller et al., 2010). Subsequently, more training and practice would aid librarians in giving better workshops and sessions.

As Goebel and Neff (2007) suggest, building a broader IL "program" through a variety of initiatives creates a broader understanding and stronger support for all program components, especially the IL courses. It also creates a wide variety of professional opportunities for librarians, thereby providing a rich and motivating work culture. Goebel and Neff (2007) continue explaining how the key in creating such a program (IL workshop and other similar sessions) is having a clear understanding of the context of one's institution to assure the highest degree of relevance, success, and satisfaction.

Future studies should look into the students' willingness to attend workshops vs one-to-one sessions on a personal level. Some students might be more willing and comfortable getting assistance from librarians one-on-one rather than in a group. Similarly, other studies can be conducted related to the factors of why students do not attend campus workshops/session which can help them for their studies. There could be a number of factors that prevent students from booking and attending similar workshops. Identifying such factors can provide valuable information for library staff on how to plan and schedule similar activities/events.

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Appendix A : University of Malta Library Information Literacy Workshop Questionnaire

Section A : Information Literacy Session Questions

01. How do you evaluate the educational techniques used during the presentation (theory, exercises, brainstorming)? *(Please choose one)*

- Excellent
- Very Good
- Good
- Fair
- Poor

02. Which of the following could make the Information Literacy sessions more effective? *(Please choose one)*

- More sessions (short course format)
- More detailed subject analysis but still one session
- Smaller groups
- Less detail
- More practical examples and time to practice

03. Do you believe that the knowledge/skills you obtained from attending the Library's Information Literacy Session are : *(Please choose one)*

- Excellent
- Very Good
- Good
- Fair
- Poor

04. When would be the ideal period for students to attend similar Information Literacy sessions? *(Please choose one)*

- 1st term (October-December)
- 2nd term (January-April)
- Other: *(Please specify)*

05. When is the ideal time to organise similar Information Literacy sessions for UM students? *(Please choose one)*

- Mornings (9am-12pm)
- Afternoons (12pm-4pm)
- Evenings (5pm-8pm)

06. At what year of study do you think similar IL sessions are the most useful for UM students? *(Please choose one)*

- 1st year of studies
- Middle of the course
- Last year of studies

07. In general are you satisfied with the Library's Information Literacy Session?
(Please choose one)

- Extremely
- Very
- Moderately
- Slightly
- Not at all

08. What other topics would you like to see the Library organise?

Section B : Marketing Questions

09. How did you learn about the Library's IL session? *(Please choose one)*

- Library Website
- UM emails
- Library's Facebook
- Faculty posters
- Word of mouth
- Other: *(Please specify)*

10. How would you like to learn about future information regarding library services?
(Please choose one)

- Library Website
- UM emails
- Library's Facebook
- Faculty posters
- Other: (Please specify)

11. How effective do you think does the library use FaceBook for promotion? (Please choose one)

- Very Good
- Good
- Fair
- Poor

12. How effective do you think does the library use the website for marketing purposes?
(Please choose one)

- Very Good
- Good
- Fair
- Poor

13. How effective are the library's emails sent to students, as marketing tools? (Please choose one)

- Very Good
- Good
- Fair
- Poor

14. What can the library do to improve its marketing potential?

Section C : Demographic Questions

15. User Category

- ERASMUS exchange student
- Postgraduate part-time student
- Postgraduate full-time student
- Undergraduate part-time student
- Undergraduate full-time student
- Support staff
- Academic staff

16. At what point are you in your course?

- Not applicable
- 1st year of course
- Middle of my studies
- Last year of course

17. Area of study:

- Arts, Language and Humanities
- Science
- Medicine and Health Services
- Management, Finance and Accounting
- Architecture and Engineering
- Laws
- Other: (*Please specify*)


18. Age

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Appendix B : University of Malta Library Information Literacy: Session Script

Introduction:

Introduce yourself.



Introduction to Research Skills

Main objective of the session:

How to become effective and independent researchers.

Main Proposition:

Research skills are relevant for success in your studies at Junior College and in any Higher Education Institution.

Understanding research skills:

Research involves the ability to learn to 'locate, retrieve and evaluate information' about any subject, for example the Systems of Knowledge coursework and project experience.

The main objectives of the session are explained to the attendees at the beginning of the workshop. The objectives are to learn how to find information more effectively, how to access different types of resources, how to evaluate said information and verify if the information is reliable. This will help students with their assignments, coursework and dissertations

What is Information Literacy?

Information Literacy is defined and explained using Cilip's definition.

Information Literacy

Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner [Cilip, 2004].

The session will be using the Big6 model as structure. This means that the outcome of the session shall be an understanding of:

- Task definition
- Information seeking strategies
- Location and access of resources
- Evaluation of information
- Use and Synthesis of information

The last two points are combined to make it easier to explain and understand. Furthermore, during this part, students will also be taught the importance of referencing.

During the Session

1. Students will identify what a need for information is.
2. Once identify the need for information, the librarian explains how to create proper keywords for research and how to conduct different search strategies. This includes using Boolean operators to combine or exclude particular keywords from the search.
3. When finding the information, students will need to go through the evaluating process to find the best and most reliable one.
4. One of the tools that students can use to search for the articles and books is the Library's Searching System: HyDi. The Librarian will show them how to perform a basic search and how to access material. Students will be explained that this is similar to many other search engines including Google scholar and subject databases.
5. Students will be instructed on the importance of referencing to avoid plagiarism.

During the session the librarian will use examples for a more practical learning experience

01.Need for information / Task definition:

Need for Information

A need for information is:

- recognizing that information is required
- understanding why information is needed
- identifying the kind of information
[Cilip, 2004]

Planning an assignment:

1. What is the topic? What do I need to write about?
2. Where am I going to look for the information?
3. How am I going to find the information needed?

A need for information appears when you are, for example, planning an assignment. What is the topic and what do you need to write about exactly?

This will help students identify what information is needed and where they are going to look for the information and how they are going to find it.

Starting the session with a practical example and a research question will be ideal. The question is used to help students to identify their need for information and to define the information task (15 mins).

02. Information seeking strategies

**Creating proper keywords -
how am I going to find the information?**

KEYWORD - a word used to indicate the content of a document
[oxforddictionaries.com].

- 1. Identify the key concepts in your research topic:**
How has the disposal of plastic water bottles impacted the environment?
- 2. Pull out main points out of the research question to find the search terms:**
disposal, plastic water bottles, impact, environment
- 3. Look up other related words e.g. phrases or synonyms:**
Disposal = removal, destruction, dumping; Impact = effect, hazard;
Environment = pollution, recycling, resources;

[Productive Researcher, Syracuse University Library]

Finding synonyms:
If you are having trouble finding synonyms for your keywords, try using thesaurus!
e.g. www.thesaurus.com

Creating Keywords

A keyword is a word used to indicate the content of a document. A good keyword will lead to the information needed

As an example the presentation will use the research topic : **How has the disposal of plastic water bottles impacted the environment?**

Think of what are you asked to write about and pull out the main points out of the research question to find the search terms.

In this case it will be: ***disposal, plastic water bottles, impact, and environment***

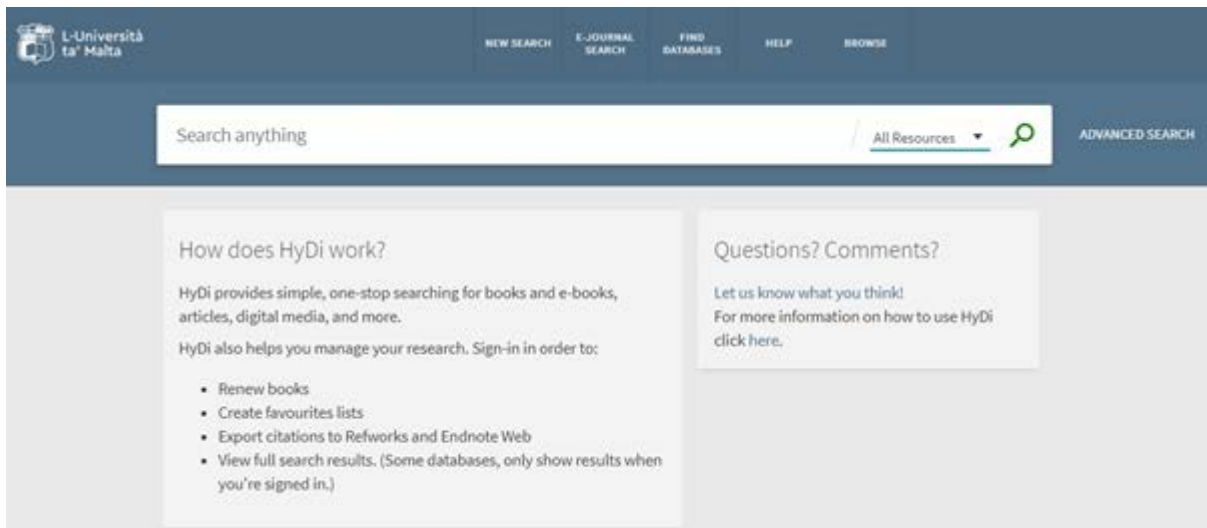
Sometimes the authors of the publications might use different keywords than the ones that were chosen by the student. To be able to find more information look up other related words e.g. phrases or synonyms using a thesaurus.

For this example:

Disposal = removal, destruction, dumping; Impact = effect, hazard;

Environment = pollution, recycling, resources;

Where to search for resources?



Before showing students different search strategies, they will be given a brief introduction to the UML search platform HyDi.

(This can be done by instructing students to go on the library's website and access HyDi during the session. As a result this will encourage a more practical use of what the session will all be about.)

- Explain the HyDi interface and where they can perform their searches.



- Show where to type in the keyword, where they can narrow down the search to print or electronic resources, etc...
- Type in a keyword to use as an example
- By default, HyDi is searching both, print and electronic material, which means, as the results, you will be able to see books that can be found at the Library or electronic articles that you can accessed from home
- Explain that they will retrieve different type of results: books, articles, journals, dissertations.

Basic online search techniques - how am I going to find the information?

After identifying the information needed, what is required to find relevant material and where to start looking for the information required, the librarian shows attendees how they can conduct different searches using Boolean Operators on the Library search tool – HyDi (30-40 mins).

There are 3 basic operators that one can use and they define the relationships between words or groups of words. They are: **AND**, **OR**, **NOT**. Here some examples using Boolean Operators and Wildcard characters will be shown on HyDi to visualise the different number of results with each search and each added operator.

Basic online search techniques - how am I going to find the information?

One of the ways to narrow down or expand your search is to use Boolean operators. There are 3 basic operators that you can use and they define the relationships between words or groups of words. They are: **AND**, **OR**, **NOT**

Operator AND

Operator OR

Operator NOT

Advanced Wildcard Search

Searching using "Wildcard characters"

You can include the following wildcard characters in your searches:

? - enter a question mark to perform a single character wildcard search

Example:

type **bottle?** to search for records that contain words **bottle** or **bottles**.

***** - enter an asterisk to perform a multiple character wildcard search

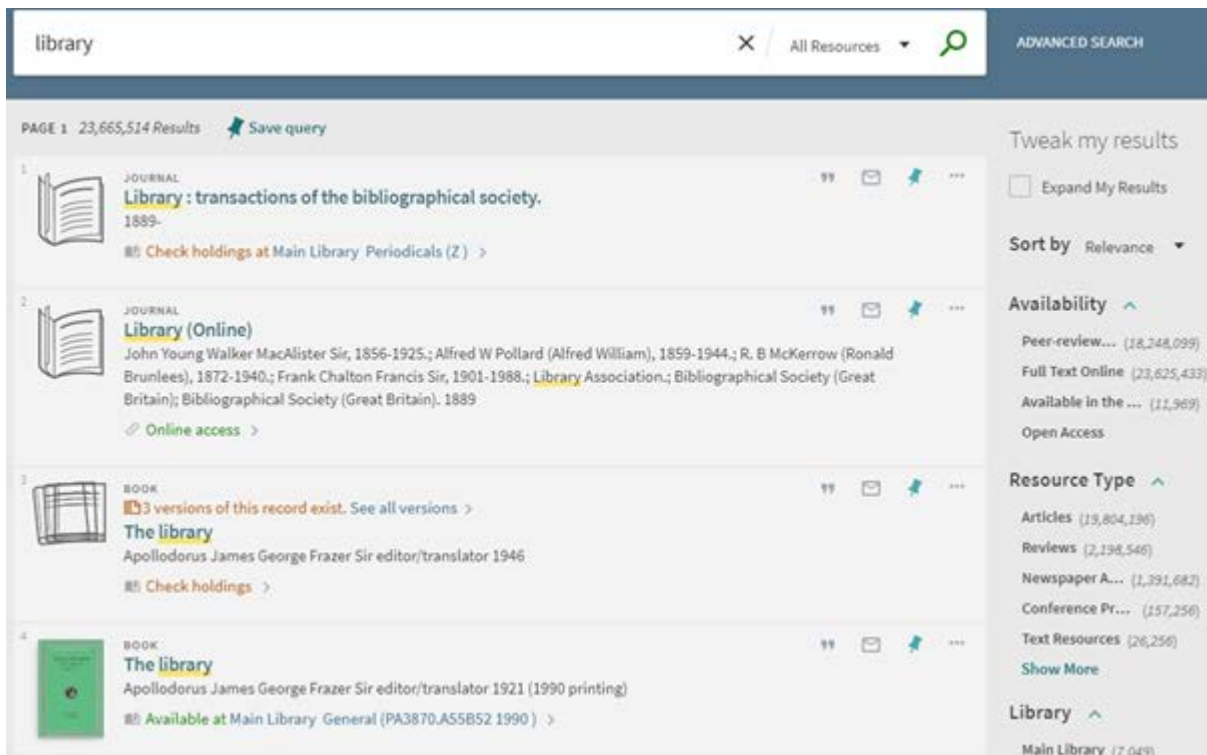
Example:

type **bottl*** to search for records that contain strings, such as **bottle**, **bottles**, **bottled** or **bottling**

03. Locating and accessing resources

Following the different search strategies, students are shown how to locate and access resources on HyDi. This includes online and print items.

During this time, the Librarian will guide students to use databases available through HyDi in order to highlight the importance of the scholarly databases (20 mins).



The librarian will also explain the difference between Journal and Databases. The librarian will showcase the different material one can retrieve by using different research tools such as databases and Google Scholar while describing the importance to identify the most suitable tool to use to retrieve the specific information needed.

04. Evaluating Information Sources:

Identifying a relevant source of information requires students to evaluate if said source is relevant to their initial research question and the task defined in the beginning of the session. Librarian and students will discuss what to pay attention to in order to evaluate a source and how to properly use, through citing and referencing, the resource in question. This will also include a short example of synthesizing information in order to draw out conclusions, arguments, theories, etc... from different resources (30 mins).

Evaluating Information Sources

You are surrounded by information. The question becomes then, how can you verify the reliability of the source?

Learn to evaluate the quality of information that you can find on the web, in the books, magazines and television.

Do not believe in everything you read, try to find and compare different information sources.

CHECK:

Authority

- Who created this information and why?
- Do you recognize this author or their work?
- What knowledge or skills do they have in the area?

Timeliness

- Does the page provide information about timeliness such as specific dates of information?
- How current are the sources or links?

[<http://eduscapes.com/tap/topic32.htm>]

Authenticity

- Where does the information originate?
- Is this a primary source or secondary source of information?
- Is a bibliography provided citing the sources used?

Reliability

- Are the sources truth worthy?
- Does information come from a school, business, or company site?

(<http://eduscapes.com/tap/topic32.htm>)

05. Using and Synthesizing the information

Referencing:

Important

Always write the reference of the source from which you are accessing and retrieving the information so that you avoid plagiarism.

Plagiarism is the citation of other works without acknowledging the source of information.

In-Text Citations

When you use others' ideas in your paper, you should credit them with an *in-text citation*.

Several different systems of citation are in use in various academic communities (such as footnotes and endnotes), but APA Style uses a kind of *parenthetical referencing* called the *author-date system*.

Basic In-Text Citation Style:

As the name author-date system implies, APA Style in-text citations include the author and date, either both inside parentheses or with the author names in running text and the date in parentheses. Here are two examples:

- After the intervention, children increased in the number of books read per week (Smith & Wexwood, 2010).
- Smith and Wexwood (2010) reported that after the intervention, children increased in the number of books read per week.

Websites

For a passing reference to a website in text, the URL is sufficient; no reference list entry is needed.

Gussie Fink-Nottle has set up a discussion forum for newt fanciers (<http://gfnnfg.livejournal.com/>).

However, when you are citing a particular document or piece of information from a website, include both a reference list entry and an in-text citation. The key to creating the reference list entry is to determine the type of content on the web page. Basically, provide the following four pieces of information:

Author, A. (date). Title of document [Format description]. Retrieved from <http://xxxxxxxx>

The in-text citation includes the author and date (Author, date), as with any other APA Style citation.

Bibliography Versus Reference List

What's the difference?

A *reference list* consists of all sources cited in the text of a paper, listed alphabetically by author's surname.

A *bibliography*, however, may include resources that were consulted but not cited in the text as well as an annotated description of each one. Bibliographies may be organized chronologically, or by subject, rather than alphabetically.

If you have been given an assignment that asks for a bibliography, consult your instructor for more specifics about the required format.

The session concludes with questions from the audience. The presentation is available online on the library's website.

The Questionnaire will be distributed at the end of the session.

Appendix C - Marketing material



LIBRARY

INFORMATION LITERACY WORKSHOPS NOVEMBER 2018

Monday 12

09:00 - 11:00 @ IT Services TR 108

Thursday 15

13:00 - 15:00 @ IT Services TR 106

Wednesday 21

13:00 - 15:00 @ IT Services TR 106

Friday 23

14:00 - 16:00 @ IT Services TR 108

To book send an email at reservations.lib@um.edu.mt
or call 2340 2541

A graphic showing the words "FAKE NEWS" in large, bold, black capital letters on a white background, framed by a grey border that resembles a newspaper clipping.

FAKE NEWS

Information Literacy Workshops December 2018

Tuesday 4

10:00 - 12:00 @ IT Services TR 108

Wednesday 5

14:00 - 16:00 @ IT Services TR 105

Thursday 6

14:00 - 16:00 @ IT Services TR 106

Friday 7

12:00 - 14:00 @ IT Services TR 108

To book call **2340 2541** or
send an email at **reservations.lib@um.edu.mt**



L-Università
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LIBRARY

Information Literacy Workshops February 2019



Thursday 7

09:00 - 11:00 @ IT Services TR 106

Wednesday 13

14:00 - 16:00 @ IT Services TR 108

Monday 18

14:00 - 16:00 @ IT Services TR 106

Friday 22

12:00 - 14:00 @ IT Services TR 105

To book call **2340 2541** or
send an email at reservations.lib@um.edu.mt

Information Literacy Workshops March 2019

Thursday 7

09:00 – 11:00 @ IT Services TR 108

Wednesday 13

14:00 – 16:00 @ IT Services TR 108

Monday 18

14:00 – 16:00 @ IT Services TR 106

Friday 22

12:00 – 14:00 @ IT Services TR 106



To book call 2340 2541 or
send an email at reservations.lib@um.edu.mt

Information Literacy Workshops April 2019



Monday 8

11:00 – 13:00 @ IT Services TR 105



Tuesday 9

15:00 – 17:00 @ IT Services TR 106

Wednesday 10

12:00 – 14:00 @ IT Services TR 105

Friday 12

14:00 – 16:00 @ IT Services TR 108



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LIBRARY

Information Literacy Workshops May 2019



Monday 6

10:00 – 12:00 @ IT Services TR 105

Thursday 9

14:00 – 16:00 @ IT Services TR 106



Wednesday 15

13:00 – 15:00 @ IT Services TR 108

Friday 24

13:00 – 15:00 @ IT Services TR 105



To book call **2340 2541** or
send an email at reservations.lib@um.edu.mt

