

THE "NEW" SOFT SKILLS FOR EMPLOYABILITY

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Abstract

The paper discusses the requirement of employers for students to have, in addition to the appropriate technical skills, soft skills, including the "new" skills associated with social media. The need for both types of skills, old and new, from various employers' viewpoints will be discussed. The paper considers methods that have been used by the authors in order to develop these, taking in depth an example of the "old" and of the "new" soft skills. These are, for the *old*, presentation skills, and for the *new* skills, the use of a drop box and Google Docs. Experiences in teaching and using these skills with the students are discussed in detail. The paper will also consider the views of a sample of the students of the new skills. Their views of the advantages and disadvantages of these new skills, related particularly to employability, are discussed.

Introduction

Changes in technology, changing work patterns and global trading in recent years have increased the importance of the *softer skills* (e.g., communication and problem solving as well as presentation, Google Docs and drop box skills). The increase in teleworking and outsourcing means technology needs to be used for effective management, development and quality assurance of systems. The pressure to reduce travel due to cost, time and green initiatives have encouraged alternative modes of working, such as video conferencing and sharing access to documents.

The traditional soft skills that students need to develop and appreciate are important, although many computing students have indicated that only the technical skills matter to them.

The changes in communication within and beyond organisations today, means that the use of e-mail and various social media techniques are now becoming more widely used. The authors feel that students should be taught to understand how to use and not to use these "newer" soft skills and understand the advantages and risks associated with them.

"Old" Soft Skills Industry Requirements and Higher Education

There has been for many years a need to provide students with non-technical skills required by many employers. These skills include:

- **Team working** as a necessary skill, as very few employees in the IT industry work in complete isolation, except occasionally in the Research and Development and also at the Testing areas. However, even in these areas, working with others is still occasionally needed.

- **Communication**, both spoken and listening, as employees are often required to communicate with others -- whether potential clients, suppliers or others internally within the organisation. Failure to listen could be extremely expensive, such as incorrect requirements being identified, or final cost contracts being signed when expensive functions had not been correctly understood. Ability for oral communications is required, as often aspects such as Quality Assurance require internal presentations. In addition, "pitches" to potential customers and progress reports to clients and to management are often needed.
- **Written communication**, as reports, proposals and internal communications are always being required. The formal written style is needed. In addition, today much of communications in organisations is via e-mail and in some cases even texts. Students must understand the use and misuse of the e-mails, as these could lead to prosecutions for inappropriate internal or external e-mails, possibly including attached pictures or cartoons. The e-mails can also form a type of contract. Badly chosen words can result in unexpected high cost and commitments to standards that are not realistic for that company. This could result from statements such as "producing code that is 100% tested and free of any bugs. "
- **Problem solving**, a skill that is highly rated by employers, as in many fields, unexpected problems arise. BSC member Sarah Winmill, when upgrading a large networking system in a historic London Palace, expressed an example of this recently. Due to the status of the building and the potential archaeological value of the surrounding grounds, cables could not be placed internally or externally in the normal manner so requiring original problem solving skills.

The use of the soft skills are clearly identified in the SFIPlus structure for IT professionals and become of greater importance in some cases than the technical skills, as the level of employability towards senior management increases (BCS, 2012).

The SFIPlus model (BCS, 2012) identifies a range of IT roles from technical to educational, and levels for each role from level 1 on just joining from school or college and level 2, which might be a possible direct entry from a relevant degree course, to level 7, being responsible for a large IT department of a company. For each level within a role, the typical job activities, qualifications, technical and wider personal development activities including involvement in professional body events are identified.

The latter is fairly similar for all of the roles, with greater emphasis on the less technical roles. The following typical activities and qualifications are from a technical database role, at level 3:

- *Communications*: Undertaking learning and practice in oral and written communications, including report writing and presentations.
- *Team working*: Undertaking learning and practice in the techniques of team working. Gaining an understanding of the underlying concepts.
- *Team management*: Undertaking learning and practice in the planning and organisation of own activities.
- *Involvement in professional body activities*: Attending meetings, seminars and workshops organised by professional body and reading published materials such as journals and Web content.

By the higher level 6, the soft skills are expected to be developed to a higher degree, for a much wider audience:

- *Participation in professional body affairs*: Taking an active part in professional body affairs at Branch, Specialist Group, Committee or Board level.
- *Publications*: Contributing to published professional and technical materials Education/Learning delivery: Lecturing, tutoring, and coaching, formally or informally, in an area of own expertise.
- *Standards and legislation*: Participating in working groups, committees, etc., responsible for the production, maintenance or oversight of relevant standards or legislative conformance requirements.

By level 7 these activities are aimed more at the international rather than the local or national level, so demonstrating the need for the soft skills.

Encouraging Soft Skills at Southampton Solent University

For a number of years, Southampton Solent University has introduced core units on all the computing courses so that students gain knowledge of professional issues ranging from the BCS Code of Conduct to relevant computer related legislation (Ross, Staples, & Udall, 2009; Uhomobhi & Ross, 2012; Udall & Ross, 2012). They would also gain experience in team working, fact-finding, interviewing, preparing CVs and applications letters and presentation skills.

“New” Soft Skills

“New” Soft Skills, Employability and Higher Education

The use of social media to enhance students’ employability in Higher Education is an established issue. The main focus of these efforts has been the use of social media as a networking tool that would assist job hunting, enabling students to properly engage in the employment market. Several efforts have been made towards that direction, and almost all higher education employability departments provide guidance to students in order to improve their online presence (Swan, 2012).

The main problem with this work is that input from the “final important user” of this process (students made employable through attending higher education), the employer, is not taken much into consideration. Most of the time, academic and support staff make assumptions about what would make

students more employable and try to assist them towards that direction based on logical reasoning. However, the voice of the employers and their needs are not actually properly understood and formalized.

Another interesting aspect that is not very well explored is that social media could and would have to be more and more an integral part of students' continuous professional development. This aspect has been explored from the teachers' perspective and the fact that it can be a means to provide a supportive professional network to educators (Xerri, 2014). Along the same line of thinking, the students could benefit from peer advice and communication, which will start from their education years and extend to their professional practice (Ross et al, 2009).

“New” Soft Skills Industry Requirements

After informal discussions and interviews with employers, the authors identified some of the requirements regarding social media and employability. These requirements are totally in line with a wide survey that was recently published where several employers were formally interviewed regarding social and digital technology in the world of work (CIPD, 2013).

First of all, employers nowadays require that employees are latest technology savvies. In any type of industry, use of the latest technology is not only an advantage but also an absolute necessity. Many employees may be asked to maintain the company website, a blog with news and projects, a Twitter account, a Facebook page/group for dissemination of results and networking, and any other technology for business development/dissemination. These tasks are most of the times in addition to an employee's normal job role (e.g., as a developer or manager). Needless to emphasize that competence in these areas gives an advantage to an employee and adds to the type of flexible and continuous professional development model (know new technologies, learn from online communities) that our difficult economic times entail.

Not only flexible employees, but also flexible ways of working and collaborating are emerging (Esposito, Kraenzel, Pepin, & Stein, 2011; Pearson, Lesser, & Sapp, 2010). The high cost of transport, necessity to outsource part of the work, achievement through collaborative work, and often multicultural collaboration is a common industry situation. For example, collaborative projects between different countries are not realistic unless effective communication takes place. To this, aid technology, such as Skype, Dropbox, Google Docs, Facebook Groups, and any other type of online collaboration tools, is essential to the survival of these collaborative attempts. On the other hand, social media are there to assist and complement the human communication aspect that is generally lacking from the online collaboration tools. As is apparent, this model of work requires employees that are comfortable and trained in the use of these new ways of collaboration.

Various employers were asked to identify the non-technical skills they would look for in a potential employee. The most popular were good communication skills, both spoken and written, especially being able to express an idea clearly and succinctly. These were felt to be important, as the employees were likely

to be required to deal with clients and suppliers in addition to other internal members of the organisation, both above and below their own level of seniority, during their career with the organisation. Team working was seen to be very important, as few worked in isolation. These teams could be geographically spread, so use of groupware and conferencing, both video and telephone, were seen as useful skills. The use of software such as Dropbox and Google+ were also viewed as useful for a potential employee. In response to personal use of social media, students viewed LinkedIn to be used for maintaining and extending their own networks, and possibly in obtaining jobs and contracts.

Taking this one step further, there is a continual emerging strong requirement by industry for the *soft skills* (Faheem, Lui, Salah, & Piers, 2013). The successful and therefore *employable* employees of the future need to be able to communicate and collaborate effectively, and in most if not all situations to work as part of a team. Knowledgeable employees that are productive only working on their own cannot be accepted as part of modern organizations. *Team players* is the number one industry requirement, as the benefits of effective collaboration cannot be emphasized enough. Improved results, as “two minds are generally better than one,” and flexibility and risk reduction as organisations can adjust more effectively to change (become more agile) are among the advantages of collaborative work. And as most of the communications have had to move to the *online* world these days (e.g., because of distance, cost of commuting), we cannot ignore the role that social media awareness can play.

Higher Education and “New” Soft Skills

Higher education should embrace these “new” soft skills employer requirements in teaching and learning to enhance collaboration and the establishment of professional networks, and, therefore, prepare students for the modern world of work. All these should be in response and in accordance to the corresponding industry requirements.

Along these lines, one of the authors, Meacham, experimented with embedding the “new” soft skills in the classroom, mainly for the Foundation year students of the Technology department in Southampton Solent University. The following sections contain examples/case studies of our work towards that direction for the industry requirements we have gathered so far, as well as the corresponding student response/feedback to the experience.

Case Study: Social Media for Degree Related Project Unit

The Degree Related Project Unit was a Foundation Degree level 3 Unit designed to give students the opportunity to study a topic area in depth that is specifically related to their chosen degree programme. They had to define a project themselves, then plan, organize and implement it. In the end, they had to present and demonstrate a working demo of their actual product. They had to learn to work in groups and collaborate closely between them. They also had to report to the tutor in regular project meetings. Summarizing, it can be claimed that collaboration, communication and planning were the most integral parts of this unit.

A variety of tools were adopted in order to enhance student-to-student and student-to-tutor collaboration. We used *Facebook Page* for tutor-student and student-student communication, *Facebook Groups* for their individual groups' technical discussions, *blogs* for work diary, *Google Docs* for online document collaboration, and *Skype* for communication off campus. Students also had to use this online collaboration work as evidence for their group work assessment, which gave more purpose and motivation to the experiment. Overall, it was more efficient than using one environment, as we were able to use the most appropriate tool for any particular situation, which was a relatively easy process due to the nature of technology students.

Google Docs, Dropbox, Blogs (Online Collaboration)

From employer requirements, it was identified that collaboration on the same document is often common industry practice and Google Docs was the most commonly used tool.

Towards this direction, the students had to use Google Docs for most parts of their project work. They used Google Docs Word in order to simultaneously work and collaborate online on the same document for their intermediate research work as well as for their final project report. Also, they used Google Docs PowerPoint in order to create/work on their final presentations. Their engagement and results through using Google Docs were impressive. It is remarkable that they extensively used all features of the tool such as the online chat part in order to discuss and agree on document/ presentation changes (Stommel, 2012).

The most important benefit of this online collaboration was the increased flexibility that an online collaboration tool provided. It is a common situation in higher education for the deadline for assignment submission to be after a holiday in order to give extra time and motivation to the students to engage with the curriculum. During holiday times, students might be away in their hometown, which means that face-to-face group meetings are not an option. Therefore, a good online collaboration tool that simulates the actual meeting is a necessity.

On another note, their project work was a twenty weeks process that required a huge amount of files and information. Google Docs wasn't most appropriate for storing a huge amount of information at the time of the experiment, so another online tool was used, Dropbox. All students had to open a Dropbox account for the purposes of this unit and share their work with the other members of the team. It should also be noted that they continued using both tools after the end of the unit.

Last but not least, they used blogs (Wordpress) to create an online diary of their progress. They made this information private and shared it with the tutor only and reported on a weekly basis their findings, milestones and results. In the end, they had to print out the information in the blog for their diary report submission.

Student Views

A pilot survey was undertaken with students who were on the Foundation year of computing degree courses at Southampton Solent University. These students had undertaken a unit including these new soft skills. Sixty per cent felt that "social media skills related to unemployment" were important, thirty per cent were not sure, and ninety three per cent could not see the benefit of learning different social media skills.

The majority of these students felt that on entering directly into employment from their degrees Dropbox (seventy three per cent) and Google Docs (eighty per cent) would be useful. Half of the students who took part in the pilot had not used these before. In both cases sixty per cent felt these skills could be useful for future employability; none disagreed, but twenty per cent were not sure.

The students identified the benefit of these new soft skills to be potentially useful for their employers in order that their staff could work effectively together even in remote locations, in keeping up-to-date, and for the organisation, as a form of advertising and of "obtaining customers views."

The disadvantages of these skills identified by the students included "time-consuming," "could be distracting," and "can isolate an individual from the real world." The negative effects for the organisation were identified as misleading or incorrect information being circulated.

Conclusions

The authors feel that these new and old soft skills should be included in all courses, especially those involving computing, whether related to business or to the more technical aspects. These skills can assist the students in obtaining employment especially with assessment selection, but also in their professional life. The use of LinkedIn and its equivalent sites are also a useful tool for recruitment.

Knowledge of these new and old soft skills can also be of benefit for the students to enhance their social life and to understand how to protect themselves from Internet problems.

Following the initial investigation and pilot survey, the authors would like, in co-operation with other institutions, to extend the investigation, to gain the views of students and their lecturers about the benefit of inclusion of the "new" soft skills. They plan also to obtain further views from employers on the importance of both the new and older soft skills.

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