

Through the looking glass: Innovative interview experiences for ICT students

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ABSTRACT

This paper provides an overview of previous research undertaken that supports the importance of soft skills for ICT graduates. Specifically this paper reports on the development of a professional practice course including the introduction of an innovative interview technique that was developed as a major component this new course. This interview component was intended to provide ICT graduates with the ability to perform at the highest possible level in interview situations. Data from several iterations of the activity were collected and analysed. This analysis agreed with previous studies and revealed that in an interview environment students were most likely to struggle in the soft skills area. The study also found that the new interview technique allowed students to gain confidence and learn about the interview process from the first person and third person perspectives. Additionally, it allowed students to reflect on their performance through video and lecturer feedback.

Categories and Subject Descriptors

K.3.2 [Computers and Education]: Computer and Information Science Education – Curriculum, *Information systems education*

General Terms

Performance, Design, Human Factors, Theory

Keywords

ICT education, soft skills, emotional intelligence, professional practice, interview techniques.

1. INTRODUCTION

The nature of work in the ICT industry has evolved over the last decade and ICT graduates are expected to possess not only technical skills but highly developed interpersonal skills and emotional intelligence. ICT professionals now need to develop the ability to seamlessly communicate with colleagues and customers on a technical and non-technical level. This has resulted in an increasing demand for soft skills from employees in the ICT industry. In an article by Salpeter, likability or cultural fit is identified as a determining factor for ICT job candidates [11]. Salpeter also highlights that soft skills or emotional intelligence is the category of skills most likely involved when evaluating likability or cultural fit [11].

The Bachelor of Information & Communications Technology (BICT) at the Universal College of Learning (UCOL) requires a

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compulsory 45 credit industry-based/capstone project over one semester which is the students' final semester and culmination of their studies. The Professional Practice course was added to the curriculum as a prerequisite to this industry project to ensure students gained an awareness of the importance of soft skills and emotional intelligence, making them ready for professional integration with industry, the work setting and subsequent recruitment processes.

The aim of the Professional Practice course is to apply communication theories and practice in a professional context. Students also source an industry project and produce appropriate documentation.

The key learning outcomes of the course were:

- Analyse and evaluate applied communication principles
- Demonstrate effective communication skills
- Procure an industry based project
- Create project scope documentation
- Demonstrate ability to work in teams

The content from the course also includes:

- Organisational communication
- Curriculum Vitae preparation
- Interview skills
- Client management
- Conflict resolution
- Assertiveness
- Negotiation skills
- Presentation skills
- Team roles and managing teams
- Industry project overview and project sourcing

The course normally includes the following assessment structure:

- Curriculum Vitae and covering job application letter
- Project proposal presentation
- Project Management Plan documentation and presentation
- Team building workshop
- Interview skills and role play session

The intention of the course structure is for students to complete the interview skills and role play session prior to sourcing their projects and developing their project proposals and management plans. The interview skills and role play session has been developed as an innovative approach for enhancing a student's ability to perform at a high level in interview situations.

Industry project students often find the interview/initial contact with their project sponsor daunting, as for many students this is

their first encounter with a potential ICT employer. The final choice as to who completes a project is with the sponsor, and if students fail to impress, they can find it difficult to secure a project. Student performance in successfully securing and completing an industry project can be a predictor of future employment success. Consequently those students who are well prepared for their industry projects will also be well equipped for entering graduate employment.

2. BACKGROUND

There appears to be a gap in the literature as to how graduates should actually portray soft skills. Research conducted by Coll, Lay, & Zegwaard [3] reported that students felt their performance at interviews was lacking as they found it difficult to come up with enough examples within the tight timeframe of a job interview. The literature gives little guidance as to how employers assess for soft skills in the pre-employment phase. McCormack [9] and Isaacs [6] believe employers do not use detailed assessment procedures when hiring, relying instead on subjective judgements or instinct when making employment decisions rather than clearly identifying the skills necessary for the job. In a review of the literature Joseph, Ang, Chang, and Slaughter conclude that there has been very little systematic research that has conceptualised or measured these soft skills [7]. Joseph et al. also introduce the idea of practical intelligence which they describe as an overarching concept that could provide a better understanding of the broader set of soft skills required by ICT professionals [7]. They believe that successful ICT professionals not only need technical knowledge and skills but also require practical intelligence which is the managerial, intrapersonal, and interpersonal skills that are used to resolve ICT related work problems [7]. Litecky, Aken, Ahmad, and Nelson support this idea by suggesting that the ICT professional's role has expanded to include not only technical skills but also increased knowledge of the business, critical thinking, and communication skills [8]. Furthermore, Carter highlights that soft skills are important to students' future success in industry pointing out that employers are explicitly asking for these skills [1]. Carter also suggests that capstone courses could be altered to afford more opportunity for soft skill education [1]. Interestingly, Joseph et al. also conclude that there is room for research into comparing the efficacy of improving emotional intelligence (or soft skills) through methods such as formal training, mentoring or actual work experience [7].

Soft Skills can be defined as skills, abilities, and traits that pertain to personality, attitude and behaviour rather than formal or technical knowledge [9]. Soft skills include attributes such as team work, communication and interpersonal skills, customer service, leadership, motivation and willingness to learn. Stevenson and Starkweather identify six critical core competencies for successful ICT project managers, these were: leadership, the ability to communicate at multiple levels, verbal and written skills, attitude and the ability to deal with ambiguity and change that were indicative of characteristics important to successful project management [13]. Duncan summarises soft skills attributes as being: self-management, team working, business and customer awareness, problem solving, communication and literacy [4]. Moss and Tilly [10] identified two distinct groups of soft skills - interactive skills and motivation skills. Interactive skills are where an employee needs to interact with other staff and motivation skills are focused on the intrapersonal factors that determine the level of work output of an individual. Aspects from both soft skills groups are required if an employee is to succeed in the current IS workplace. In contrast to these soft skills 'hard skills' are the technical skills relevant to a

particular industry [5]. In the ICT industry some of these would include systems analysis, database concepts, networking and programming [14].

In previous work soft skills identified as relevant for ICT students were divided into two categories: interactive soft skills and motivation soft skills [10], [12]. The nine interactive soft skills were as follows:

- Listening
- Interpersonal
- Relationship building
- Written communication
- Adaptability
- Team work
- Friendliness
- Attire
- Grooming

The 10 motivation soft skills were:

- Planning
- Initiative
- Problem solving
- Enthusiasm
- Stress tolerance
- Dependability
- Time management
- Innovation
- Willingness to learn
- Self confidence

Based on the work done by Snell, Snell-Siddle, and Whitehouse, [12], the top three interactive soft skills as identified by employers were listening, interpersonal and team work. The top ranking motivation soft skills were willingness to learn, enthusiasm, problem solving and initiative. These findings were also supported by earlier research conducted by Coll, Zegwaard and Hodges [3].

Based on the literature soft skills have been clearly identified as a necessary attribute for ICT graduates looking to begin work in the ICT industry. As these skills are now known as critical for ICT employment it is imperative that educational institutes not only embed soft skills within the curriculum, but also to explicitly provide focused, experiential learning for students to develop and portray these soft skills.

3. METHODOLOGY

In light of the research and the importance of soft skills an innovative interview role play assessment was developed as a major component within the Professional Practice course within the BICT degree. In a related study, Chen, Muthitaacharoen, and Frolick, looked at the effectiveness of role play exercises for soft skills improvement for ICT professionals [2]. They found that role play exercises were an active learning technique that created training situations where the interpersonal interactions and communication flow characteristics of the ICT industry can be simulated. They concluded that role play exercises were a viable training method which can rapidly improve communication skills, allow participants to experiment with different strategies without real consequences, and also enhance to self-confidence of participants.

Building on what is known about soft skills education, an innovative interview role play technique was developed for this

study. It was designed to create an awareness of soft skills and to provide students with a real world experience that highlights the importance of being able to demonstrate an array of the necessary skills, abilities and traits required in an interview situation.

The role play interview exercise comprised of a panel of three ICT industry representatives who took the role of potential employers. The students took on two roles during the exercise, first as a third person observer of the interview process, and then secondly as the interviewee. The students took turns in the 'hot seat' as the interviewee, meanwhile, the rest of the class would observe the interview process from the perimeter of the room as shown in figures 1 and 2.



Figure 1. Student in the hot seat with peer observers



Figure 2. Interview panel with student participant

In the weeks leading up to the role play exercise extensive preparatory work is undertaken with the students. Information about the interview process, typical interview formats, common questions, presentation tips, and non-verbal communication skills are covered. Examples range from suitable business attire, personal hygiene, hand shaking, eye contact, ways of answering behavioural descriptive and hypothetical type questions, building rapport, and ways of coping with unexpected questions and interview stress.

Prior to the interview role play the panel members were briefed by the Professional Practice lecturer and were given a structural outline of the interview activity with starter questions and a job outline with scenario (these resources were also made available to the students prior to the activity). Panel members then build from these starter questions and scenario to ask more technically specific questions. Panel members were also asked to give a five to ten minute presentation to the students about how they interview within their respective organisations and key characteristics that they look for when interviewing. These presentations occur directly before the role play exercise and help to set the tone for the coming activity for both the students and the panel members.

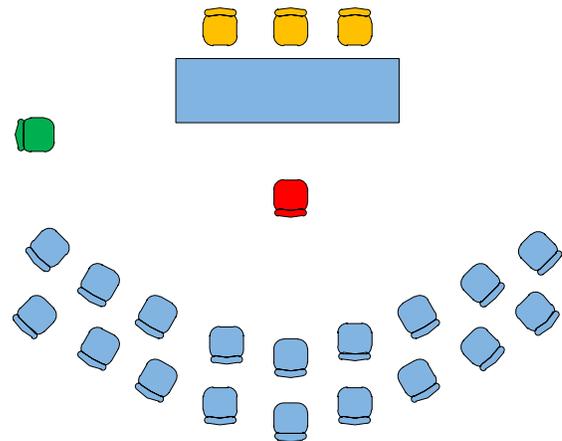
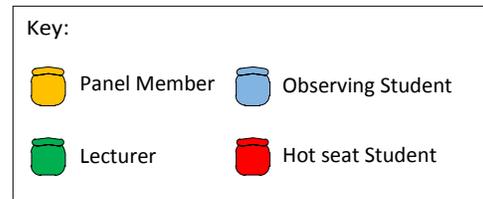


Figure 3. Suggested interview layout

Once the interview role play begins each student is randomly called to the interview hot seat by the lecturer. The student will remain in the role of the interviewee for approximately five minutes during which they will answer three to four unique questions. As this is happening the other students are observing the interview process from a third person perspective. This allows each student to learn from not only their own experience, but also from the experiences of other members of the class as they respond to different questions. Furthermore, the entire interview role play activity is filmed enabling each student the ability to review and reflect on their interview experience.

Post interview role play each panel member provides general feedback to the students as a whole regarding the activity. This feedback often includes comments about student responses and interview performance. Positive aspects are highlighted as well as areas that could be improved. This debrief session is often interactive allowing students to seek clarification, ask further questions, and gain specific feedback from the panel members. Finally, to conclude the session an afternoon tea is provided which

also doubles as an opportunity for students to network with the panel members.

The research sample used for this particular study consisted of students enrolled in a level 7 professional practice course. The students were all in their final year of study and were preparing to source industry based capstone projects. The experiences reported on in this study were collected from several iterations of the professional practice course. The data used in this study were collected via general verbal discussions, participant observations, and analysis of the recorded interview footage. The research sample was predominately male with the majority of students being in their mid-twenties.

The interview role play sessions were conducted during the first half of each semester. The activity takes approximately two to three hours and is often dependant on the size of the student group. Furthermore, the interview role play session was also a compulsory assessed component of the professional practice course. Data were collected during these sessions by the lecturer acting as a participant observer, assessor, and session facilitator. Video footage of the interviews was also used as a data source for this study.

4. RESULTS AND DISCUSSION

Although data were collected from several iterations of the interview role play activity, the results will be presented and discussed from the perspectives of the three main roles the participants played during the activity: the student perspective, the panel perspective, and the lecturer perspective.

4.1 The Student Experience

Prior to the session, students reported feelings of anxiousness and nervous anticipation, despite the preparatory work undertaken during class time. Although at first thought this sounds like a negative experience, it in fact demonstrates that the activity is a true reflection of a real world interview experience.

During the interview activity, students began to adapt to the environment and were able to draw on lessons learnt in the preparatory sessions. After students had completed their turn in the “hot seat”, they appeared more relaxed, as would be congruent with a real world interview. However students were still able to observe their peers being interviewed. This was a unique environment in which students were able to gain exposure to the varying questions and responses, thus providing a learning experience that otherwise would not be encountered in a real interview situation.

After the “hot seat” component, students actively engaged with the interview panel members. During this dialogue students were observed as being more relaxed, however they still maintained an appropriate level of professionalism towards the panel members.

In the subsequent weeks/months, as students had time to reflect they began to appreciate how beneficial the experience was. This was particularly evident when students were able to draw on the experience when securing their industry based capstone projects and interacting with their potential sponsors. Furthermore, students from the earlier iterations of the exercise who successfully entered the job market have reported the activity as being essential to their success during the interview process.

4.2 The Panel Perspective

Each semester the panel members report that they are impressed with the level of professionalism demonstrated by the students. Some students have also been “head hunted” by members of the

panel as a result of their performance during the role play interview. The panel members have always been very supportive of the role play activity and are always willing to participate in future iterations.

4.3 The Lecturer Perspective

From the lecturer’s perspective, the interview role play activity functions extremely well as an assessable component in the Professional Practice course. The lecturer does need to act as a facilitator during the session however this is not a time consuming role. The majority of the time, the lecturer can act as an assessor, observing each student’s individual performance as well being able to review video footage of the interviews to assist with marking and feedback to the students. The activity is also a great way to bring industry into the classroom and connect students with employers.

5. CONCLUSION

There is no doubt that the portrayal of soft skills play a role in most, if not all, hiring decisions. The interview role play technique developed for this study has proven invaluable for students providing them with a real world experience, highlighting the importance of being able to demonstrate an array of the necessary skills, abilities and traits required in an interview situation. The role play activity, while providing the real world interview experience, goes beyond this and gives participants the opportunity to hear a wide range of other “interviewees” responses and their reactions to challenging and “left field” type questions.

The interview role play technique was a valuable learning experience for the participants, providing them with an opportunity to engage with ICT professionals, while at the same time completing part of the assessment requirements for the course.

The researchers envisage that the interview role play activity could well be applied to any discipline which requires students to work within industry as part of their study. Future work could include surveying students, lecturers, and panel members before and after to collect quantitative and qualitative data relating to the suggested benefits and insights of the activity.

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