# A competency development approach to learning for employment

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### Abstract

Higher Education Institutions are increasingly aware of industry expectations regarding work-ready graduates. Work Integrated learning (WIL) and co-operative education initiatives are widely acknowledged for improving professional skills and work readiness, however, graduates often lack the 'soft' skills (communication, collaboration, problem solving) deemed essential for enhanced productivity and innovation in the workplace. Anecdotal evidence from the Professional and Community Engagement (PACE) program at Macquarie University, identified the difficulties that students experience in self-assessing employability skills.

This paper discusses the theoretical and practical development of a competency development approach to learning for employment using an Assessment Centre process model currently embedded in the curriculum of one PACE unit. Developed and coordinated by post-graduate psychology students, the model provides a set of behavioural criteria by which to assess student employability skills.

While there is little evidence in the literature of the use of AC's for enhancing undergraduate employability, preliminary research and evaluation findings from this project, suggest that the AC process can have a positive influence on the development of the 'soft' skills of employability.

**Keywords:** Assessment Centre; soft skills, employability, competency; goal setting

# 1. Introduction

Higher Education Institutions are increasingly aware of industry expectations regarding the work-ready graduate. Jackson (2010) asserts that institutions worldwide are accused of producing graduates deficient in the 'soft' skills deemed essential for enhanced productivity and innovation in the workplace (i.e. employability skills). A useful definition of employability skills is "a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace – to the benefit of themselves, their employer and the wider economy" (CBI, 2009, 2011). Lees (2002) contends that employers seek graduates who demonstrate self-efficacy (confidence to succeed) and agency (ability to act), which support a range of beliefs and attitudes that enable critical reflection and adaption to contextual variations.

Universities are shifting their thinking about how to produce work-ready graduates. Aligned with this objective, there has been a surge in the use of experiential, Work Integrated Learning (WIL) programs, in recognition of them being the superior choice for developing generic and employability skills (Smith et al., 2009).

The value of experiential learning in developing capabilities (knowledge, skills and behaviours) has been widely recognised by industry for many years. The Centre for Creative Leadership in the US developed a learning model for business executives based on 30 years of research into the factors that contribute most to their development (Rabin, 2014). Coined by Lombardo and Eichinger (2000), the 70:20:10 model suggests that leaders and potential leaders develop mainly (70%) from challenging on the job assignments (completing tasks or projects), partially (20%) from developmental relationships (coaching, mentoring, etc.), and finally (10%) from coursework and training (reading and listening).

This paper discusses the development of a competency development approach to learning for employment in WIL, using an Assessment Centre methodology in one Professional & Community Engagement (PACE) unit at Macquarie University. The PACE program offers undergraduate students experiential learning opportunities with local, regional and international partners. Through PACE, students undertake mutually beneficial work placements (WIL) that meet both the partner's organizational goals and enable students to strengthen graduate capabilities, while gaining credit towards their degree. Designated as Macquarie University's 'signature program' (Macquarie University, 2013, p.11), all PACE units are embedded in the curriculum, with the aim of providing a transformative student experience that assists students in developing as work-ready, civically-minded global citizens.

# 2. Competency development approach

### 2.1. Assessment center (AC) methodologies

ACs are best known for their use as a tool in the recruitment and selection of job candidates. Most research about ACs has focused on their use as selection devices, however, many organisations now use them as a development tool (Howard, 1997). ACs use similar assessment methods for both selection and development purposes, however, the assessment results are used very differently. The results of a developmental AC are provided to participants so they may understand their current strengths and development needs and formulate their future development plans. Apart from incorporating in-depth feedback, these developmental ACs sometimes incorporate some form of self-assessment (Wilson, 1996).

These centres use a variety of assessment techniques that provide participants with the opportunity to demonstrate essential job-related skills, abilities and competencies under standardised conditions (Kottke & Shultz, 1997; Sturre et al., 2011). Typical job-related skills and competencies include problem solving and analysis, written and oral communication, interpersonal skills and teamwork. While personal preferences and cognitive abilities of individuals can be embedded in the AC process, the main reason for the process is to obtain data from the use of behavioural-based exercises/simulations (Waldman & Korbar, 2004; Sturre et al., 2011). There are a variety of exercises including in-tray exercises, role-play exercises, analysis and presentation exercises and leaderless group discussions. Throughout the simulations, the performance of participants is observed and rated by assessors against the job competencies, providing accurate information on participants' behavioural competence (Woodruffe, 2007; Sturre et al., 2011).

In a recent study conducted by Sturre, Von Treuer and Keele (2011), knowledge of the results of the AC led to an improvement in students' performance. The benefits of the AC included the provision of feedback on students' assessment and identification of their development needs. While participants found the AC exercises to be difficult, there was a consensus among participants that they assess relevant competencies and are useful for their development (Howard, 1997; Keele, et al., 2010).

# 2.2. Goal-setting theory and its relevance to skill development

Goal-setting theory is based on Ryan's (1970) premise that conscious goals affect action. A goal is the object or aim of an action, for example, to attain a specific standard of proficiency, usually within a specified time limit. For goals to be effective, people need formative feedback that reveals progress in relation to their goals. If they do not know how they are doing, it is difficult or impossible for them to adjust the level or direction of their effort or to adjust their performance strategies to match what the goal requires.

Formative assessments or feedback – also called assessments for learning or learning-oriented assessments – are regarded as one means to facilitate learning and reflection in students (Webb, 2010). As some surveys have shown, students on placement regard deliberate and systematic reflection as integral to the learning process (Crebert et al., 2004). This reflection enables individuals to construct different mental models and optimise future responses to work problems (Maclellan, 2004). Formative assessments seem to speed up the development of capabilities that predict career success in the future, such as self-regulation, self-efficacy and lifelong learning skills (Yorke, 2005).

VandeWalle et al. (2001) conducted a study on the relationship between goal orientation and performance over a series of two challenging performance events. They found that, following feedback, only those subjects with a learning goal orientation performed positively at the next event. A learning goal orientation was defined as a focus on developing one's competence by acquiring new skills, mastering new situations and learning from experience. The findings of this and other research into goal-setting theory has significant implications for the skill development of graduates who participate in assessment centres and work placements, and who receive feedback as part of their development planning and monitoring.

#### 2.3 Embedding an AC in curriculum

The impetus for this study derives from the results of a pilot study of an AC run in the faculty of Human Sciences PACE unit, FOHS300 in Session 1 2016. The study reported, through anecdotal evidence, students' enhanced capacity for self-reflection for assessing key employability skills, namely: communication, problem solving, influencing and negotiation, and collaboration. All PACE units require students to complete between 32-140 hrs of placement over one ssession (semester) unit. FOHS300 is a multi-disciplinary unit requiring 70 hrs on placement. The AC was designed to be implemented prior to students undertaking work placements, with the specific aim of designing goal-oriented development plans, to be actioned and monitored whilst on work placements.

An important aspect of curriculum design for experiential learning lies in the teaching framework developed to support student learning. Coulson & Harvey (2013, p. 404) contend "the need for scaffolding reflection for learning through experience as a process of layered learning interventions designed to encourage students to build their understanding, confidence, skill, and agency as they move into, through, and out of learning experiences that are set outside the formal academic setting". Scaffolding reflection in the unit content and delivery, facilitated and supported students' formative and suumative learning, in the classroom, on placement and through assessment tasks.

The AC program was developed, coordinated and implemented by Masters of Organisational Psychology students at Macquarie University under the guidance of senior

academics. As assessors, the students undertook focus groups, utilising the Saville and Holdsworth (SHL) universal competency cards (SHL Group plc, 2004) to identify the behavioural competencies important for entry level social science graduates, specifically those mentioned above. Information from employer sources were also used as part of this process to establish a set of competencies that would be considered universally relevant and typical of those often found as entry level role requirements. Competencies needed to be generic due to group diversity in participant degrees and placement activities.

Students' competencies are evaluated using a range of approaches that gather data about their work-readiness. Students complete a pre and post 45 question employability survey collecting information about their self-efficacy in seeking employment information, their networks, agency and preparedness for employment. This data provides a baseline for students' work-readiness. At this stage base-line data does not include bias towards gender, employment experience, ethnicity, geographical location or age. Participants then complete an Assessment Centre, are given feedback about their performance, and development goals are set.

The Guidelines and Ethical Considerations for Assessment Center Operations informed the development of the exercises (International Taskforce on Assessment Centre Guidelines, 2009). Assessors created practical exercises and behavioural indicators to ensure depth of understanding and consistency in rating. Three exercises were developed to measure the competencies outlined, including a written task, a behavioural interview, and a group discussion. The exercises provide a realistic simulation of applied problems, such that taken together, they become a typical selection process for an entry-level role.

The AC runs in three-hour blocks, with up to six students assigned to a group. Six to seven assessors are assigned to the group, each interacting with two to three participants and rating different competencies. To reduce bias, assessors are assigned to an exercise, as well as rating different participants. On completion of the exercises, assessors undertake data integration, whereby competency scores are aggregated across exercises based on pooled information from assessors. A template report is populated with the data, which is used to provide feedback during an individualised goal setting discussion with participants.

Assessors conducted feedback sessions of approximately one hour with each participant individually. Each session provides students with an explanation of the competencies assessed within each activity undertaken, a debrief of the individual's performance, and an exploration of discovered strengths and areas for development. The discussion culminates in setting goals and the design of plans to target the development of relevant competencies. Plans are documented in a report, which is given to the student. While the AC is not assessed, students collect evidence of achievement of their goals whilst on placement, write a reflection and analysis based on the evidence, which is then assessed.

An ethics agreement for this research is current, however, due to ethical considerations involving perceived coercion, consent to collect the data can only occur once students have completed the unit and all assessments are marked. Given the unit is running till the end of January, data collection will not be finalised to late February, with analysis occurring subsequently. Survey information will be aggregated and grouped under the constructs: self-efficacy, positivity, professional industry networks, employability self-awareness, communicating with people (in business contexts), resilience, and job seeking skills. As we want to ascertain which, or indeed if any, of these constructs were more influenced than others as a result of the AC and internship process, across-group and within-group comparisons will be analysed.

#### 3. Conclusion

The review of the research literature indicates the importance of developing the employability skills of future graduates. It provides strong evidence of the effectiveness of work-integrated learning practices (particularly work placements) in developing these skills. Additionally, the evidence suggests the need for systematically assessing the skills, competencies and behaviours of undergraduates for development purposes. It also supports the need for ongoing feedback and critical reflection on students' progress towards development goals, and it recognises the importance of students adopting a learning goal orientation to maximise the benefit of their experience.

The AC model presents a process methodology for assisting students in achieving a set of developmental competencies that support learning for employment. The research and evaluation findings, on the efficacy of the model, will be available when the data is collected and analysed.

# References

- Coulson, D. & Harvey, M. (2013). Scaffolding student reflection for experience-based learning: a framework, Teaching in Higher Education, 18(4), 401-413.
- Confederation of British Industry (CBI). 2011. *Building for growth: Business priorities for education and skills*. Education and skills survey 2011. London, UK: CBI.
- Crebert, G., Bates, M., Bell, B., Patrick, C.-J., & Cragnolini, V. (2004). Developing generic skills at university, during work placement and in employment: graduates' perceptions. *Higher Education Research and Development*, 23(2), 147-165.
- Howard, A. (1997). A reassessment of assessment centers: Challenges for the 21st century. *Journal of Social Behavior and Personality*, 12(5), 13-52.
- International Taskforce on Assessment Center Guidelines. (2009). Guidelines and Ethical Considerations for Assessment Center Operations. *International Journal of Selection and Assessment*, 17(3), 243-253.
- Jackson, D. (2010). An international profile of industry-relevant competencies and skill gaps in modern graduates. *International Journal of Management Education*, 8(3), 29– 58.
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40, 350–367. doi:10.1080/03075079.2013.842221.
- Keele, S. M., Sturre, V., Von Treuer, K., & Feenstra, F. (2010). Evaluation of the use of assessment centre methodology to enhance development planning, work placement outcomes and work readiness for postgraduate students a pilot. *Journal of Teaching and Learning for Graduate Employablity*, *I*(1), 1–28.
- Kottke, J. L., & Shultz, K. S. (1997). Using an assessment center as a developmental tool for graduate students: A demonstration. *Journal of Social Behavior and Personality*, 12(5), 289-302.
- Lees, D. (2002). Graduate Employability Literature Review: LTSN Generic Centre.
- Lombardo, M. and Eichinger, R. (2000). *The career architect development planner (3rd edition)*. The Leadership Architect Suite.
- Maclellan, E. (2004). How convincing is alternative assessment for use in higher education? *Assessment and Evaluation in Higher Education*, 29(3), 311-321.
- Macquarie University. (2013). Our university: A framing of futures. Retrieved, from http://mq.edu.au/our-university/.
- Rabin, R. (2014). Blended learning for leadership The CCL approach. White paper.
- Ryan, T. A. (1970). Intentional behavior. New York, NY: Ronald Press.
- SHL Group plc (2004). *Competency Profiler, Version 4.0*. Thames Ditton, England: SHL Group plc.
- Smith, M., Brooks, S., Lichtenberg, A., McIIveen, P., Torjul, P., & Tyler, J. (2009). Career Development Learning: Maximising the contribution of work-integrated learning to the student experience. *Final Project Report June 2009*. University of Wollongong. Careers Central. Academic Services Division.

- Sturre, V., Von Treuer, K., Keele, S. M., & Moss, S. A. (2012). Overcoming inconsistencies in placement assessment: The case for developmental assessment centers. *Asia-Pacific Journal of Cooperative Education*, *13*(2), 65–76.
- VandeWalle, D., Cron, W., & Slocum, J. (2001). The role of goal orientation following performance feedback. *Journal of Applied Psychology*, 86, 629-640.
- Waldman, D. A., & Korbar, T. (2004). Student assessment center performance in the prediction of early career success. *Academy of Management Learning and Education*, 3(2), 151-167.
- Webb, M. (2010). Beginning teacher education and collaborative formative e-assessment. Assessment and Evaluation in Higher Education, 35(5), 597-618.
- Wilson, D. (1996). The future of development centres. *Career Development International*, 1 (6).
- Woodruffe, C. (2007). Development and assessment centres: Identifying and developing competence (4th ed.). London: Human Assets Ltd.
- Yorke, M. (2011). Work-engaged learning: towards a paradigm shift in assessment. *Quality in Higher Education*, 17(1), 117-130.