

Learning for the Workplace: Exploring professional identity in search of meaningful alternatives to student work placement (0128)

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## **Context**

Universities are no longer free to dictate curricula with scant regard for graduate outcomes. Moves towards marketisation in higher education have encouraged universities to place a higher priority on employability within curricula design. The value of relevant work experience to students is well established (e.g. Brooks, 2012), however universities are not able to control the supply of industry placements with the result that some students are unable to access these opportunities. Recognising some of these challenges, the e-Placement Scotland project set out to increase the availability of paid placements for computing students. Recognising, however, that not every student will choose to undertake a placement or successfully apply, one of the aims of the project was to add value to students whether or not they secure a placement. Value-adding events, such as industry tech talks and speed networking, can heighten industry awareness and prepare students for placement and/or graduate jobs. A greater awareness of the impact of various factors on students' emerging sense of selves as professionals could help universities identify meaningful alternatives to a work placement. This study was designed to gain insights into the impact of placement and value-adding events that could mitigate against a lack of relevant placement experience.

## **Theory**

Role theory allows for an examination of our self-identity through the roles we hold, for example as student or professional (Serpe & Stryker, 2011). Professional identity has been described as a 'state-of-mind' with students beginning to feel like a professional as they start to prepare for a professional role (Crossley & Vivekananda-Schmidt, 2009). Self-identity is affected by social, demographic and personality factors in addition to exposure to professional practices (Chamberlain et al., 2005), however previous research on the influence of work-based learning has found that work-based and work-integrated learning are ideal arenas for students to develop their professionalism and professional identities (Trede, 2012; Smith et al., 2014). Participating in activities that relate to the profession has been found to help students identify as professionals (Lave & Wenger, 1991), while delays in developing a professional self-identity can present a barrier to the successful transition from student to professional (Schwertner et al., 1987).

## **Method**

A review of studies of professional identity in other disciplines was undertaken to explore suitable techniques and a Professional Self Identity Questionnaire designed for health and social care students (Crossley & Vivekananda-Schmidt, 2009) was adapted for computing students. The instrument reflected different domains of activity common to the discipline and curriculum benchmarks were used to adapt the questionnaire.

Four over-arching themes were identified:

- Knowledge and understanding (questions 1, 2)
- Application of knowledge and skills (questions 3, 4)
- Transferable / interpersonal skills (questions 5, 6)
- Professional skills (questions 7, 8, 9)

For example, question one asked; “when reflecting on my knowledge and understanding of essential concepts relating to my computing discipline I feel like a.....” The response was an indication on a 6-point Likert scale between novice and professional.

Questions eliciting characteristics and year of study were included. The questionnaire was deployed in three settings (n=74):

- 4<sup>th</sup> year students final project presentations
- 3<sup>rd</sup> year in-class
- 2<sup>nd</sup> year students about to start a one year placement

The data was analysed in SPSS.

## Study Findings

The gender and age of the respondents is typical of the balance in this discipline across the university. Table 1 includes information about the gender breakdown and the range of ages.

	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	All Students
N	19 (24.4%)	21 (26.9%)	34 (43.6%)	74
Male	15 (79%)	17 (81%)	31 (91.2%)	63 (85.1%)
Age	17-49	17-49	17-49	17-49

Table 1: Summary of participant characteristics

The data was analysed to consider professional identity related to year of study, gender, age, attendance at placement preparation or careers events and previous placement experience.

Responses were significant for year of study, with higher scores returned by later years of study for questions 1-4 and 9. Question 1 related to essential facts, question 2 ability to analyse, questions 3 and 4 application of knowledge, finally question 9 related to understanding best practice and standards.

There was no statistically significant difference in professional identity score between different genders or for different age ranges for all questions. Nor was there a significant result on any questions for students who had attended events/activities compared with those who had attended no events/activities.

A significant difference was found between students who had completed a placement and those who had not for questions in each category (1, 3, 4, 6 and 9). Question 6 related to communication skills.

## Discussion

The study showed that students in later years of their course increasingly identified as skilled computing professionals. Overall, self-identification for placement and non-placement students was similar; although students who completed a placement were more likely to

claim communication skills, these skills are of value to placement employers and could have been developed prior to securing the placement.

Although the intention of the value-add events was to benefit all students, not just those who secured a placement, the pre-placement preparation events had no impact on the students' sense of self as a professional. McKinnon & McCrae (2012) found that students had less confidence in their skills and abilities on completion of a work-related module with speculation that this was due to greater awareness of the challenges that lay ahead.

One further concern in this study was that students in later years did not change their view of their own ability to adapt (question 7). This is a concern for curriculum developers: the Digital Skills for the Economy report (2016) identified the need for universities to ensure graduates are adaptable in the face of new technology.

In conclusion, to meet student demand for graduate employment, the challenge for universities should not be understated. One approach would be to create a secure pipeline of placements and design evidence-based meaningful alternatives that facilitate self-identification as skilled graduates. Easier said than done.

## References

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