expensive for universities to provide facilities such as mock-up tunnels and stopes and pilot plants, and to develop a virtual reality capability and various forms of simulated learning.

If one assumes that industry may still prefer that the major part of WIL must be workplace-based learning, then this raises the question of how universities can guarantee workplace-based placement for students. This is because providing such placements involves scarce industry resources and not all employers in need of qualified persons may have the capacity to provide students with suitable workplace-based support. One option may be to limit student numbers to what industry is capable of committing to. But should universities follow the example of the various faculties of medicine and veterinary sciences, both of which have stringent pre-screening mechanisms? A university that applies such screening mechanisms needs to know how many students can be absorbed by industry and various other employer organizations. Following the example of the faculties of medicine means that engineering departments in universities will need to have suitable screening and selection mechanisms in place to determine which of the applicants will have the best chances of success in their future careers. Perhaps another solution is for mining companies to re-introduce the well-known and respected Learner Official programmes.

Pathway 2 has the potential to overcome the above problem (at least, to some extent). The 240-credit Dip (Eng Tech), which will include theoretical and laboratory modules but no compulsory work-placed based modules, can act as a 'screening mechanism' before successful (but unemployed) students are employed by industry. The Stage 2 structural and mentored professional development of engineering graduates could be designed in such a way as to incorporate WIL.

Conclusion and the way forward

Decision-makers in university departments have to consider many factors, requirements, and constraints when deciding on a PQM. In this paper, I have generalized and expanded ECSA's pathways for professional registration to suggest a proposed 'pathway tool' that will reduce the complexity (by one level) of this decision-making process. Instead of having to decide on the basis of a menu of thirteen qualifications and associated programmes, I propose that decision-making be done from a menu of four main articulated 'NQF L5-10' pathways that also include one or more of the ECSA's pathways leading to professional registration. The proposed 'NQF L5-10 pathways' tool is an attempt to move one step closer to the aim of achieving a structured decision-making approach for designing a PQM at departmental level. A holistic evaluation of the strengths and weaknesses of various 'NQF L5-10' pathways and combinations of such pathways are required when deciding on a PQM. The mining section at the Department of Electrical and Mining Engineering at Unisa proposes pathway 2 as its PQM for the discipline of Mining Engineering.

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Erratum

The affiliation for the author A. Heidary Moghadam published in the SAIMM *Journal* vol. 113, no. 12, pp. 941–945 entitled: '**A study on the effect of coke particle size on the thermal profile of the sinters produced in Esfahan Steel Company (ESCO)**', by A. Dabbagh*, A. Heidary Moghadam†, S. Naderi*, and M. Hamdi* was incorrectly listed by the author.
The correct affiliation of the author should be Metallurgy Department, Engineering Faculty, Islamic Azad University, Dezful Branch, Dezful, Iran