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The BASES Expert Statement on The Role of Breakfast-Physical Activity Interactions for Energy Balance and Metabolic Health

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Vocational Masters degrees in sport and exercise science

Dr Andrew Scott, Sally Hinton, Prof Dawn Skelton, Prof Anna Campbell and Prof Helen Dawes share their thoughts on a changing postgraduate landscape.

Many students enter university to study degrees, such as sport and exercise science, that do not necessarily lead to a defined career with the expectation of finding their vocation during their studies. Those of us long past our undergraduate days may still believe we are yet to find ours... In this instance it is logical that undergraduate sport and exercise science remains broad to encourage the development of knowledge, skills and behaviours that are relevant to working in human science disciplines without unnecessarily tying 18-year olds into a career they knew little about before applying for their course. The BASES Undergraduate Endorsement Scheme and BASES Accreditation for sport and exercise science laboratories perform a useful role in providing frameworks to ensure our students receive balanced and relevant training in sport and exercise science. There are large numbers of students registered on sport and exercise science-related undergraduate degrees and, with the advent of postgraduate loans, graduates from these programmes are progressing to Masters degrees, with a 66% increase in students registered on Masters degrees in the Department of Sport and Exercise Science at the University of Portsmouth this year. The increasing expectation is that such study will lead to guaranteed employment, even better pay or progression to a research degree. With this backdrop it is more important than ever that students are prepared for their future and the need for vocationally-relevant postgraduate training has never been greater.

Vocationalism in Higher Education

There is a large difference in learning and teaching styles between vocational education and higher education. Vocational training is focused on the development of practical application of skills that are standardised and provided to learners through teacher-practitioners and assessed in a standard manner so that every learner who passes assessments is deemed as competent. Here there are no degrees of competency, just competent or not. In such courses students are encouraged, or mandated, to gain work experience to be exposed to the related clinical speciality, in the case of specialist exercise instructor courses. This often differs from approaches in higher education where the lecturer is a facilitator who has the autonomy to decide what is taught and how it is taught, with the learners taking responsibility for what they learn, hopefully engaging in cutting-edge research and generally through the “find out for one’s self” method of learning through independent research. Access to directed or quality assured placements is not always available. This style of learning

distinguishes learners who are able to research appropriate information and synthesise this to coherently address the learning objectives being set, thus indicating how well the learner can work independently. In this approach there are degrees of proficiency, with the lowest proficiency threshold often set at only 40%. Both approaches are fine for their intended outcomes and due to their inherent differences need to be carefully blended to ensure that teaching, learning and assessment styles neatly fit together in a coherent programme of study that not only develops professionals capable of processing and communicating cutting edge research findings but are capable of implementing these into applied practice outside of the sport and exercise science classroom.

Current approaches

A good example of subject-specific programmes of study are the sport and exercise psychology pathways that train students in education, theoretical practice and research including accredited undergraduate study, accredited Masters degrees and accredited Professional Doctorates. Still, these are not BASES accredited and there is little direct work or placement experience related to such programmes, which are essential to translating what is learned in the safe and controlled classroom to what occurs in the wider working world when working with a diverse range of people. Other Masters degrees contain professional development modules that may require placement experience or contain aspects of BASES supervised experience workshops to prepare students for their future careers. It is imperative that such programmes of study contain vocationally-relevant experience and professional development workshops in relation to prepare them for their future career, i.e. BASES Supervised Experience workshops are one example, allowing the students to gain experience, learn from their experience and put learning into future practice. Outside of the UK and in relation to clinical exercise, Exercise and Sports Science Australia accredits Masters degrees in Clinical Exercise / Physiology with nearly all Exercise and Sport Science Departments in Australian Universities delivering standardised programmes, including clinical placements working with people with long-term health conditions. Such standardisation and quality assurance encouraged the Australian Government to recognise exercise physiology as a health care profession.

Case study in MSc Clinical Exercise Science

The MSc Clinical Exercise Science has been delivered at the University of Portsmouth since 2010, utilising the expertise of

clinical physiologists, exercise scientists, NHS clinicians and local clinical exercise services to provide training and experiential placements in research, clinical physiology, exercise and behaviour change for cardiac and pulmonary rehabilitation, and diabetes management. The course recruited fairly well, up to around 15 students per year and tending to be more popular with female students, and resulted in relevant employment outcomes for graduates but without further training the graduates could not be recognised as clinical exercise specialists, which helps with professional indemnity and of course future employment and promotion.

We recently decided to modify the course to embed vocational training courses so that the learners graduate with a Master’s degree, work experience and additional certifications in fitness instructing, exercise referral, exercise after stroke, exercise for falls prevention, cardiac rehabilitation, pulmonary rehabilitation and exercise and cancer treatment. Such a programme relies on strong working relationships between the university, training providers and placement providers, which we have. The advantage of this approach is that exercise scientists, physiotherapists and fitness professionals study together on the vocational courses to learn from each other’s strengths to provide a potentially rich learning experience and develop future inter-professional working relationships. However, the contrasting independent learning style developed by good students by the time they complete their undergraduate studies and the understandably prescriptive nature of the teaching and assessment approaches of the vocational courses to ensure competency require some work to function alongside one another. In this instance the vocational courses are not necessarily level 7, which poses a challenge for a level 7 course. To partly overcome this, the vocational assessments carry no weighting and are assessed as competent or not competent. Due to this, the higher education and vocational teaching teams should work further together to merge aspects of the recipe-style learning and independent learning styles together to ensure a consistent approach to the learning experience. Mapping of Master’s degree curriculums to the vocational curriculum and gaining recognition from the training provider to deliver parts or all of the courses may be one method of combining the two together.

The task of combining Masters level study with vocational training is not straight forward due to the perception that this reduces the amount of subject-specific learning and teaching opportunities. However, it is important for developing professionals that have standardised and recognised vocational skill-sets who understand evidence-based practice and the importance of research and development in equal measure. Further challenges with such a course is that exercise is not recognised as a health care profession, as opposed to in Australia where professionals who have followed a standard course of study are accredited as exercise physiologists and are paid from healthcare insurance. This is a problem for employability but some NHS Trusts also charge for placements because they do not recognise such graduates as being their future workforce, even though our graduates do become employed by them; although sadly not often as clinical exercise physiologists. Hopefully, this will change soon as lifestyle medicine becomes increasingly needed to address increasing healthcare costs. To address this, standardised vocationally-relevant training is required.

Future directions

- BASES, employers and universities should work with each other to create standardised courses to develop work-ready (or at least near work-ready) graduates. Such courses should incorporate endorsed training and credit-bearing or non-credit-bearing work experience. BASES has published guidance on good in work experience for students and graduates (Pye, 2013; Board, 2014).
- Students should be introduced to BASES accreditation during

their studies rather than finding out about supervised experience after graduation. Integrating BASES workshops and the start of supervised experience, or similar variations, should be incorporated into Masters degrees in sport and exercise science.

- BASES should be engaging with national organisations for developing professional recognition for graduates in exercise and health to develop accredited exercise physiologists or certified clinical exercise physiologists.
- Taking part in vocational training and gaining work experience is one aspect of professional development and assessed coursework encouraging students to reflect on their experiences, including the professional strengths they have developed and the weaknesses that remain to be addressed, supports the learners’ ability to develop coherent job applications and likelihood of gaining employment and career progression.

Take home message

The increasing postgraduate market and requirements for graduates to possess quite substantial experience necessitates that Masters degrees should contain problem-based learning alongside relevant vocationally-relevant training and experience to prepare our learners for working in the organisations that are the most likely employers of such graduates. Many higher education institutions and courses do so already but the challenge is for these to be standardised in the UK and to be the norm not just outstanding exceptions. ■



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