

HE Bioscience Teacher of the Year 2020 Application Form

Dr Sue Jones – York St John University

1. Individual excellence in the development and implementation of teaching bioscience

In not more than 500 words please outline, with evidence (references are not included in the 500 word limit), how the candidate displays individual excellence in the development and implementation of approaches to teaching that have proven successful in promoting bioscience student learning and achievement

I am highly successful in inspiring students (as demonstrated by annual student-led award nominations and excellent student outcomes) but the uniqueness of my application for Bioscience Teacher of the Year is based on my sustained efforts to support every student to achieve their best. This sets me apart from colleagues.

As a “first in family” student myself, the transformational effect of my own educational journey motivates me to transform students, their abilities and confidence, whatever their background and previous educational experience.

I have a detailed understanding of how to support students who have high aspirations, but may not know how to achieve or struggle to maintain them [1]. I have deliberately set attainable entry tariffs, and advised on the assessment strategies and curricula of two level 3 Access courses. I have also delivered over 35 public engagement activities, allowing almost 400 students (aged 8-18 years) from non-traditional backgrounds to access University.

I have recruited fifteen inclusive cohorts to my Biomedical Science programmes to date (entry tariff 104 UCAS points) from A-level, BTEC and Access programmes. Because of this, I ensure that I provide a supportive academic and pastoral environment. I currently have 32% students from IMD quintiles 1 and 2 (Index of multiple deprivation) and 41% from POLAR quintiles 1 and 2. Additionally, 45% of my students are first in family to study at University, compared with 35% for the institution. Thus my students particularly need support to adjust to the differences in learning, teaching and assessment in Higher Education.

I believe that an effective personal tutoring system is essential to help all students to transition to life at University and support their academic journey [2]. I have championed personal tutoring for over 10 years and developed a peer-mentoring scheme [3] to improve student engagement and retention rates. I embedded my highly successful tutorial system across the Faculty at my previous institution benefitting >500 students per year (2009-2014) and the School at my current institution (>100 students per year (2014-2019)).

To further support my inclusive cohorts, I used constructive alignment [4] to embed transferable skills and laboratory competencies, with an emphasis on personalised learning and small-group teaching. My work with over 35 academic colleagues in Biomedical Science has increased retention rates by 5% to 90-95% between 2009-2014 (150-160 students per cohort) and 95-100% across four cohorts (2014-2019).

The success of my extensive support mechanisms in facilitating students to transition to autonomous learning (using extensive authentic learning experiences [5], is evidenced by outstanding student attainment and graduate employment. Currently, 92% and 94% of my students have achieved 1st or 2.1 degrees in 2018 and 2019. One of my personal tutees commented at graduation 2018: "Sue is an empathetic and approachable individual who is a consummate professional. She always goes above and beyond her role to ensure each student achieves their full potential."

471 words

2. Involvement in scholarly and professional development activities

In not more than 500 words please describe all scholarly or professional development activities that the candidate has undertaken, which have influenced and enhanced the learning of bioscience students

I strongly believe that continuing the development of oneself, colleagues (in academia or professional practice) and critically our students, is an integral part of being an academic. I am passionate about increasing teaching quality outside my immediate academic role, through dissemination.

Through my active engagement in professional development, I continually reflect on my academic practice with reference to wider literature. Pedagogical workshops that directly fed into my ongoing successful programme design and outstanding student support include: An Excellent & Engaging Student Experience (2014); Rethinking assessment design and feedback processes for greater impact on learning – David Boud (2016); Improving student attainment: why it matters and how to do it better (2017); Exploring and Measuring Learning Gain (2018); Universal Design for Learning (2018).

I have attended institutional L&T conferences annually since 2005 and regularly present sessions. I have: shared good practice (2012) with a presentation entitled "Personal Academic Tutoring – Beyond Advice and Support"; presented on our innovative use of Open Badges (2016) (see Section 6); run an institutional workshop on "Developing confidence in research skills and communication for students throughout their degree" (2017) for internal and external colleagues from HE and FE. I have participated in several external L&T discussions and HUBS meetings to network and share best practice with respect to learning, teaching and assessment. At the HUBS Spring Meeting (2016), I presented a poster on "Old problem – new tricks?" describing the use of varied and competency-based assessment, to develop academic integrity and reward engagement / skill development. I also published a case study (2017) on our embedding of a student-led peer-mentoring system [3]. Discussing pedagogy with inspiring colleagues has

affirmed my philosophy and extended my knowledge on how to best support students and challenged some of my pre-conceived ideas.

I have recently created some case studies as a resource for good practice in authentic assessments following the HUBS Spring Meeting (2019) to be shared nationally as part of a toolkit. I am planning to host a national workshop on authentic assessment in 2020 through HUBS funding, or as part of the HUCBMS annual international conference that I am organising at my institution. Additionally, I have advised a colleague (University of Bath) on creating a Practical Skills portfolio based on my practice through the Bioscience Special Interest Group in Pedagogical Research group (2019). Finally, I am currently writing my application for Principle Fellowship of the HEA and also National Teaching Fellow claim for 2020.

My commitment to ongoing professional development links directly to my passion to transform student, practitioner and staff outcomes through developing skills, enhancing capabilities and building confidence. My sustained encouragement and guidance has produced students, practitioners and colleagues who are proactively engaged in their own development.

Successful student outcomes (achievement, behavioural and attitudinal) and outstanding student satisfaction are clearly evidenced in Section 3. My direct impact on colleagues through my ongoing CPD interventions (Peer Observation of Learning and Teaching) and pedagogical discussions to increase confidence and enhance professional practice institutionally, nationally and internationally are evidenced in Section 5.

500 words

3. Supporting colleagues and influencing learning

In not more than 500 words please provide evidence of how the candidate supports colleagues and influences bioscience student learning beyond their department and institution

I am passionate about developing practice and sharing pedagogical approaches. My support and guidance of colleagues has a clear link with my passion for transforming students' lives. Improving the quality of colleagues' work has a direct impact upon the students they interact with. My ultimate aim is to encourage all staff to be enthusiastic, achieving their potential and with a passion for what they do. I have supported colleagues institutionally and (inter)nationally, with evidence of longevity, global impact and scope.

I have led change and innovation in colleagues' academic practice by getting "buy-in" to the institutional Peer Observation of Learning and Teaching (POLT) policy, rather than imposing it in a top-down way. My effectiveness as a Learning and Teaching Leader is demonstrated by 100% staff engagement in POLT (30 academic colleagues) across my School in both 2017/18 and 2018/19, compared with little and uncoordinated engagement previously.

My effective support of colleagues has directly influenced the quality of their teaching practice. Comparison of module evaluation satisfaction scores shows that 25% of modules have

increased scores for “**feedback**” and for “**enthusiastic lecturers**” in 2018/19 compared with 2017/18, where the academic team remained the same. Only 3 from 16 modules had overall satisfaction scores of <4.0 / 5.0. My organisation of useful POLT activities and/or discussions has enhanced teaching practice and developed confidence.

Additionally, I have mentored ten academic colleagues across two institutions and strongly influence the academic practice of my team. The impact of my support and leadership is evidenced by our overall satisfaction scores (4.2 to 5.0 (the maximum score)) in **all** module evaluations (2015/16 to 2018/19).

Having gained my SFHEA in 2014, I have subsequently mentored several fellowship applicants across several institutions. All colleagues (1x AFHEA, 4x FHEA and 3x SFHEA) have successfully gained their fellowship following my support. I am also currently mentoring 3 further SFHEA applicants in 2019/20.

Feedback on my mentoring is very positive:

“Sue mentored me as a new lecturer, as I established my own style of teaching and scholarly activity. Sue’s influence is still felt every day in the way I support and interact with my own students.”

Dr David Smith. NTF, SFHEA, HEBTOY 2019

Nationally and internationally, I have explicitly enhanced pedagogical practice at 19 institutions, through my active contributions in re-validation / re-accreditation panels and external examining duties. During visits as a Programme Leader (Singapore, 2012) and external examiner (Sri Lanka, 2016 and Malaysia 2018 onwards) I lead pedagogical discussions with colleagues on delivery of teaching and quality assurance / enhancement in learning and teaching.

Finally, I have successfully designed and delivered “Training for Trainers” courses for local NHS colleagues, across two institutions since 2009. The participants are senior NHS practitioners, responsible for training staff and placement students. I have guided >250 practitioners to deliver engaging and supportive training in the Yorkshire and Humber region. Nationally, I have supported >300 practitioners (since 2015) through my leadership of a CPD module for the Institute of Biomedical Science (IBMS).

494 words

4. Exhibit innovation that has proven to improve their teaching practice to enhance student learning

In not more than 500 words please provide evidence of how the candidate exhibits innovation in their teaching practices to enhance student learning

I strive to extend knowledge, build enthusiasm and cultivate the desire to learn. I feel strongly that my students should take responsibility for their own progress, but in the knowledge that I am available to help and advise [6].

The unique aspects of my programme design are the culmination of my pedagogical CPD over

15 years. I designed my programme with a spiral curriculum, where the students revisit key topics and techniques [7,8] and I embedded clear vertical alignment of subject-specific and transferable skills to build confidence. The learning outcomes, learning activities and assessment strategies follow the principles of constructive alignment [4].

My embedded academic and pastoral care provides an excellent opportunity for student-centred learning to prepare them for lifelong learning [11]. Frequent meetings support the students and allow appropriate and targeted interventions as required. This supportive culture is further enhanced using Peer Assisted Study Sessions (PASS). The scheme is formally timetabled and is self-perpetuating. It has run for each cohort of students alongside scheduled, regular tutorials and is integral to the students' development as active learners (Section 3).

Further, in all modules my students have the opportunity to attempt formative assessment and receive detailed feedback before summative assessment. Feedback can be dialogic between tutor and student or peer-feedback from a range of collaborative learning activities. Engaging students in this way allows them to understand, interrogate and challenge the standards, outcomes and criteria used to evaluate their work [12]. The effectiveness and positive impact of my approach is evidenced through outstanding academic achievement (Section 3) and excellent **learning opportunities** (100% satisfaction on NSS questions 5-7 for 30/31 students surveyed thus far).

I encourage students to question themselves, peers and academic staff to develop knowledge and aid understanding [10]. To achieve mastery, I have embedded authentic, experiential learning and supported open learning (SOL) sessions that supplement practical classes in a less-formal environment. SOLs facilitate inclusivity and a deeper understanding of the core practical and wider theoretical context. Students demonstrate competency in laboratory techniques and engagement with the programme / peers to earn Open Badges. The students build a personal development portfolio each year that includes skills audits, their badges and a reflective statement on their progress. This integrated active learning and competency-based training directly addresses the national issue around the "*quality and nature of the skills possessed by some graduates*" of STEM degrees [9]. The success of my approach is demonstrated by 100% of the first cohort (2018) in post-graduate study or graduate employment within 6 months of completing the programme.

To conclude, all of my students achieve positive outcomes. There are no differential outcomes for students from any split metric data. Analysis of POLAR / IMD groups, BAME, male / female outcomes and first in family statistics shows that my students achieve well academically, regardless of their wider demographic background. I have established a learning environment that identifies and addresses any barriers to transform student outcomes, culminating in outstanding academic achievement and employability.

493 words

References

1. Menzies, L. (2013) Educational aspirations: how English schools can work with parents to keep them on track. DOI: 10.13140/RG.2.2.11887.07842
2. Robbins, S. (2012) Compendium of effective practice in higher education retention and success. P55-59
https://www.heacademy.ac.uk/system/files/what_works_compendium_effective_practice.pdf
3. Jones, S. (2017) Cathedrals Mission Group - peer learning project 2017. Case Study "Peer mentoring in Biomedical Sciences, University Of York St John"
<http://www.lde-studentsuccess.com/uploads/stdscs/attachments/Learning%20from%20Best%20Practice%20in%20Peer%20Learning%20and%20Mentoring%20across%20The%20Cathedrals%20Group%20-%20Compendium%20of%20Cas.pdf>
4. Biggs J. (1999). Teaching for Quality Learning at University, Society for Research into Higher Education / Open University Press, Buckingham
5. Mueller, J. (2006). Authentic assessment toolbox.
<http://jfmuellet.faculty.noctrl.edu/toolbox/whatisit.htm#looklike>
6. Boud D. (1988). Moving Towards Autonomy. Developing Student Autonomy in Learning, (ed) Boud D. pp17-39, London UK: Kogan Page
7. Bruner, J. (1960). The Process of Education. Cambridge, MA: Harvard University Press.