Serial numbe r	0270
Title	Developing students as researchers and learners in Higher Education: the experience of SADRAS
Submitter	Dr. Isabel Huet, Mr. Hendrick van der Sluis, Mr. Steve Woodfield

Title of the paper: Developing students as researchers and learners in Higher Education: the experience of SADRAS

Purpose of the study

The benefits of staff-student partnerships in higher education are widely reported in the literature (Claus, Brand, Bartholomew, & Millard, 2013; Curran & Millard, 2016; Healey, Flint, & Harrington, 2014; Huet, van der Sluis, & May, 2016; Little, 2012) and they have, therefore, been reinforced and promoted in many institutions worldwide. The Higher Education Academy report "Engagement through partnership" (HEA, 2014), reports that such partnerships increase students' engagement, their sense of belonging to the academic community, their success in learning, and that this is key to their learning gains and achievements. However, much of this evidence is based on "case-studies or anecdotal reports that students like it" (Healey, Flint, & Harrington, 2014, p.60) and the impact of these partnerships in terms of learning gains has not been extensively investigated. This paper discusses evidence from an evaluation study based in one UK teaching-focused university that examined how students' participation in small scale pedagogical research projects, working in collaboration with staff, can promote the development of students as both researchers and as learners in Higher Education (HE).

Context

The study focused on staff-student partnerships in pedagogical or institutional research, which are shaped by the core assumption underpinning the promotion of research-based education: that students learn most effectively in a research or inquiry-based mode. We particularly share Bell's view of students as "co-enquirers" (Bell, 2016) in the development of research and/or scholarship of teaching and learning. Healey and colleagues contend that these partnerships are a means of engaging students as partners in HE (Healey et al., 2014). According to several authors (Brew, 2013; Dickerson, Jarvis & Stockwell, 2016; Healey & Jenkins, 2009; Huet, I., Baptista & Ferreira, 2013; Huet, Baptista, Costa, Jenkins & Abelha, 2009) learning in a research environment fosters the academic and practical capabilities of students, allowing them to become more independent, autonomous and critical learners, and consequently better prepared to succeed in their studies and adapt more successfully into employment.

The Student Academic Development Research Associate Scheme (SADRAS) was initiated in 2012-13 to stimulate and support partnerships between students and staff. SADRAS encourages staff and students to undertake pedagogical or institutional research to improve the student academic experience at the university. The main aims of the scheme are to instil the student partners with a greater sense of engagement and belonging through working closely with staff, to enhance their research skills, and to develop their academic persistence and proficiency. The scheme is also aligned with institutional policies to promote a research-based education environment; foster participation and engagement among the Black and

Minority Ethnic (BME) undergraduate students; and to develop academic skills amongst all students (Noakes, May, van der Sluis & Gay, 2013; van der Sluis, May, Locke & Hill, 2013). Each year the scheme selectively funds twenty-three projects, and allocates a small budget to each to pay for student work.

Methodology

The study used an evaluation research methodology (Cohen & Manion, 2011) which had two objectives. The first was based on the pragmatic research paradigm, with the aim of reporting and enhancement of the programme. The second was based on the constructivist research paradigm in which the evaluation findings were used to build knowledge about a specific phenomenon – in this case, the learning gains for students who participated in the scheme. The different objectives led the research to use a sequential mixed method design research approach involving both quantitative and qualitative approaches (Teddlie & Tashakkori, 2009; Morse, 1991).

The study participants were students and staff who engaged SADRAS in two academic years, 2014/2015 and 2016/2017. Data was collected through online questionnaires targeted to the scheme participants, analysis of text from students' reflective blogs (2016/17) and final reports, and focus groups with staff and students (2016/2017). The quantitative study gathered participants' perceptions of the scheme's impact on students' personal and academic development. The qualitative study explored the development of students as researchers and as learners in HE in more depth.

Quantitative data was analysed using both descriptive and comparative statistics. Qualitative data followed, in a first instance, a theoretical framework (theoretical propositions, Yin, 1994) and the raw data (e.g. open questions of the survey or transcripts of the interviews) was analysed through a thematic analysis (Braun & Clarke, 2006). The design of the study is systematised in table 1.

	2014/2015	2016/2017
Quantitative approach	Data collection instruments	Data collection instruments
	Questionnaire to staff (n=12) Questionnaire to students (n=27)	Questionnaire to staff (n=19) Questionnaire to students (n=22)
Qualitative approach		One focus-group with staff (3 participants) & One focus-group with students (3 participants)
		Final-reports (7)
		Student blogs (3)

Table 1: Design of the study

Key findings

The data from the questionnaires, show a consistent response over the two cohorts 2014/2015 and 2016/2017, whereby no significant difference (Fisher's Exact Test) was found between staff and students' level of agreement. The data shows that staff and student collaborations supported through SADRAS have acted as 'change agents' (Mick Healey et al., 2014) within the institution and have contributed to students' learning gains, in particular to the development of their research competencies. For example, both staff and students identified that the SADRAS projects contributed to students' sense of autonomy, responsibility and independence, which are core employability skills (Mason, Williams & Cranmer, 2009). Moreover, participating in 'real research' has stimulated the SADRAS students' experiential understanding of social science research approaches, methodologies and methods. Students also developed competencies such as information handling, research communication skills; and cognitive abilities such as evaluation and analysis. For most students SADRAS was their first exposure to research as a core dimension of academic practice, which had sparked further interest in research, strengthened their confidence to succeed with their current studies, and stimulated their ambitions to continue with further studies in HE.

Qualitative data also revealed that the challenges faced by students as researchers in SADRAS projects were perceived by the participants as a learning gain. For example, the data collection process required persistence and resilience from students, and even the lack of communication that sometimes occurred between students or staff pushed students to become more autonomous and responsible for taking decisions.

Final Considerations

This study provided an in-depth view on the impact of SADRAS for the students who participated in the scheme. The quantitative data from two separate academic years are consistent and reinforce the value of such schemes for the participants. The findings highlight the employability benefits and learning gains that can result from staff-student partnerships that engage students to learn in a research and inquiry-based environment. These findings reinforce the previous studies conducted by Huet and colleagues (Huet, Baptista & Ferreira, 2013; Huet et al., 2009, 2016). For most students participating in SADRAS was their first exposure to research - an important aspect of academic practice – and it encouraged them to consider engaging in more research in the future. It also strengthened their confidence and engagement with their current studies, and stimulated their ambitions to continue their studies in HE. The evaluation evidence suggests that the programme outcomes provided added value to all students, not just the selected group of students who participated. The challenge now is to engage more students to work with staff in non-funded projects so as to develop a community of research-active students that value the research experience for its contribution to both their learning and lifelong employability skills.

References

- Bell, A. (2016). Students as Co-Inquirers in Australian Higher Education: Opportunities and Challenges. *Teaching & Learning Inquiry*, 4(2), 1–10.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Brew, A. (2013). Understanding the scope of undergraduate research: a framework for curricular and pedagogical decision-making. *Higher Education*, *66*(5), 603–618.
- Claus, N., Brand, S., Bartholomew, P., & Millard, L. (2013). *Student Engagement: Identity, Motivation and Community*. Libri Publishing.
- Curran, R., & Millard, L. (2016). A partnership approach to developing student capacity to engage and staff capacity to be engaging: opportunities for academic developers. *International Journal for Academic Development*, *21*(1), 67–78.
- Dickerson, C., Jarvis, J., & Stockwell, L. (2016). Staff–student collaboration: student learning from working together to enhance educational practice in higher education. *Teaching in Higher Education*, 2517(April), 1–17.
- HEA. (2014). Framework for partnership in learning and teaching in higher education. The Higher Education Academy.
- Healey, M., Flint, A., & Harrington, K. (2014). *Engagement through partnership : students as partners in learning and teaching in higher education*. The Higher Education Academy.
- Healey, M., Flint, A., & Harrington, K. (2014). Engagement through partnership: students as partners in learning and teaching in higher education. York: HEA.
- Healey, M., & Jenkins, A. (2009). Developing undergraduate research and inquiry. HEA.
- Huet, I., Baptista, A.V., & Ferreira, C. (2013). Developing Undergraduate Students' Generic Competencies through Research Activities. In C. Nygaard, N. Courtney, & P. Bartholomew (Eds.), *Quality Enhancement of University Teaching and Learning: theories and cases* (pp. 87–102). Libri Publishing.
- Huet, I., Baptista, A. V., Costa, N., Jenkins, A., & Abelha, M. (2009). Evaluation of Undergraduate Students' Involvement in Research Projects. *The International Journal of Learning*, 16.
- Huet, I., van der Sluis, H., & May, S. (2016). Staff-student partnerships in pedagogic research: the benefits for students' development of research competencies. In 9th International Conference of Education, Research and Innovation. IATED.
- Little, S. (Ed.). (2012). Staff-Student Partnerships in Higher Education. Bloomsbury.
- Louis Cohen, Lawrence Manion, K. M. (2011). Research Methods in Education. Routledge.
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes? *Education Economics*, *17*(1), 1–30.
- Noakes, H. J., May, S., van der Sluis, H., & Gay, J. (2013). Speaking the same language. *Widening Participation* {&} *Lifelong Learning*, 15(2), 56–78.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Methods Research*. Thousand Oaks CA: Sage.

- van der Sluis, H., May, S., Locke, L., & Hill, M. (2013). Flexible academic support to enhance student retention and success. *Widening Participation* {&} *Lifelong Learning*, *15*(2), 79–95.
- Yin, R. K. (1994). Case Study Research. Design and Methods. Sage Publications.