1 Research methods teaching in vocational environments: developing critical engagement 2 with knowledge? 3 C. Gray<sup>1</sup>, R. Turner<sup>2</sup>, C. Sutton<sup>3</sup>, C. Peterson<sup>2</sup>, S. Stevens<sup>3</sup>, J. Swain<sup>1</sup>, B. Esmond<sup>4</sup>, C. 4 Schofield<sup>5</sup> & D. Thackeray<sup>6</sup> 5 6 <sup>1</sup>Academic Partnerships, Plymouth University, Drake Circus, Plymouth PL4 8AA. Email: 7 Claire.gray@plymouth.ac.uk (corresponding author) 8 9 <sup>2</sup>Pedagogic Research Institute & Observatory, Plymouth University, Drake Circus, Plymouth 10 PL4 8AA. Email: 11 12 13 14 **Disclosure Statement** 15 There are no personal or institutional conflicts of interest to be disclosed. 16 17 This research was funded by the Higher Education Academy under the Teaching Research 18 Methods stream 2012/13 19 20 Abstract 21 22 23 Knowledge of research methods is regarded as crucial for the UK economy and workforce. However, research methods teaching is viewed as a challenging 24 area for lecturers and students. The pedagogy of research methods teaching 25 within universities has been noted as underdeveloped; with undergraduate 26 students regularly expressing negative dispositions to the subject. These are 27 challenges documented in university-based HE, yet little is known of the 28 29 practices and pedagogies of research methods teaching in the college-based HE setting, where the delivery of HE has grown in prominence in recent years. 30 31 Because college-based HE is widely regarded as primarily vocational, incorporating research methods into curricula may be seen as an additional level 32 33 of complexity for staff to negotiate. In this paper we report on data collected within a study to examine research methods teaching in Social Science 34 35 disciplines on HE programmes taught in college-based settings in England. Drawing on data obtained from college-based HE lecturers and students we 36 37 discuss features of research methods teaching and how these may be applied with a diverse student body, within vocationally-focused institutions. Issues of 38 39 institutional culture, resourcing and staff development are also considered as

40 these are identified as integral to the successful embedding of research methods41 teaching.

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Keywords: Widening participation, Foundation degrees; research-based curricula; HE
in FE

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# 48 Introduction

Further education (FE) colleges in England have had a longstanding commitment to the 49 provision of higher education (HE) (Parry 2009). This provision offered is largely perceived 50 as fulfilling a particular remit: primarily vocational, work-based and employer led, reflecting 51 52 the established position of colleges as preparing students for the local economy and having close links with employers (Bathmaker and Avis 2005). Given this, it is often assumed that 53 the students studying within FE colleges are doing this alongside other commitments and are 54 predominantly part-time learners (HEFCE 2006). College HE students have also been 55 described as less academically integrated (Crozier, Ray and Clayton 2010). Additionally, the 56 57 long tradition of sub-degree level qualifications means that colleges HE provision is often perceived as restricted to this level. However, HE in colleges has become more diverse as a 58 59 consequence of successive government policies regarding the accessibility and funding of HE (Parry 2006). 60

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FE colleges were placed at the forefront of HE expansion following the Dearing Report 62 63 (Dearing 1997) and the following white paper The Future of Higher Education (DfES 2003). These acknowledged the unique position of FE colleges with respect to their links with 64 65 communities and employers, and therefore were viewed as ideally positioned to take forward agendas around Widening Participation, Lifelong Learning and increased participation in HE 66 (Parry 2010; Blunkett 2000). This triggered a period of growth (Parry 2009), which was 67 supported by favourable public funding, and supported via organisations such as the Higher 68 69 Education Academy (HEA), Foundation Degree Forward, and the Association of Colleges. 70 Policymakers were keen to address concerns that the Higher National Diplomas / Certificates 71 had fallen out of favour with employers and that enrolments on these programmes were in decline (DfEE 2000). A new qualification was perceived as a means of redressing this 72 73 balance (DfES 2003) and creating a bridge for articulation onto honours degrees' (Robertson

74 2002). Foundation Degrees (FD) were identified by HEFCE as connecting the academic-75 vocational divide between universities and colleges (HEFCE 2002). FDs built on the 76 traditional FE values of work-based learning and employer engagement, but were designed to develop students' academic knowledge further (Parry, Blackie and Thompson 2009). This 77 78 was recommended firstly through the provision of the environment and resources 'appropriate' for HE study (Parry et al. 2009), but also, and more crucially, lecturing staff 79 80 embracing pedagogies of HE teaching e.g. research informed teaching, problem-based learning and research-based curricula (QAA 2010). Secondly, completion of the FD 81 82 represented an entry route into a full honours degree as students were presented with the opportunity of 'topping up' through their validating partner (Parry et al. 2009). The role of 83 universities as providers of FDs as well as partners to colleges in validation arrangements was 84 85 central to this initiative.

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This presents a somewhat simplified picture of what has become a hugely complex area 87 (Parry 2009). In this paper we examine research methods teaching as one particular aspect in 88 the provision of HE in FE, an area which has yet to be widely considered (Burton and 89 90 Schofield 2011). Studies examining the experiences of non-traditional students, such as those 91 associated with college-based HE, have observed the impact of diverse entry profiles on 92 retention and achievement, with lecturers noting that supporting students 'learning how to 93 learn' is essential (Leese 2010). This issue crystallises around research methods teaching 94 which can be a difficult subject for students (of any level) to grasp (Benson and Blackman 95 2003). Indeed, for those progressing on to 'top up', the social and academic challenges 96 associated with the transition from the college to the university have been reported 97 (Greenbank 2007), but also difficulties completing a dissertation as part of the honours 98 component of their studies (Tait and Godfrey 2001). HE pedagogies, particularly research 99 methods teaching, which can emphasise independent study, are sometimes seen as at odds with FE practices which are ingrained within the college (Bathmaker et al. 2008). Therefore 100 research methods teaching, and the pedagogies associated with its teaching, have crept up the 101 agenda of college-based HE (Burton and Schofield 2011). This agenda is also usefully 102 103 viewed from the perspective of how critical engagement with knowledge is employed within 104 an environment that some have argued is increasingly defined as 'teaching only' (Esmond 105 2012). Drawing on qualitative and quantitative data collected from college-based students and staff using a range of methods, we consider the issues and challenges associated with 106 107 research methods teaching in English FE colleges.

#### Research methods teaching within the HE curriculum 109 We feel it is important to frame our study in the context of research methods teaching 110 with regards to university-based HE, as this is an important reference point on which 111 112 college-based HE lecturers can draw. Arguably, scholarship is what makes HE unique and separates it from other levels of education (Lea and Simmons 2012). Through 113 scholarship students become active participants in their learning; they go beyond 114 115 acquiring knowledge to shaping it, developing criticality, becoming analytical and 116 moving toward independence in their learning (Lea, 2014). As the quotation below suggests, by engaging in scholarship students can develop skills and expertise 117 important to their future careers: 118 119 Teaching students to be enquiring or research-based in their approach is not just 120 a throwback to quaint notions of enlightenment or liberal education but central 121 to the hard-nosed skills required of the future graduate workforce (Jenkins, 122 123 Healey and Zetter 2007: 3). 124 125 A number of different approaches have been used to promote the integration of scholarship and scholarly practice into HE teaching. Healey, Jenkins and others have written about the 126 127 benefits of encouraging students to be more scholarly, advocating the use of inquiry-based learning and promoting curriculum design that see students undertaking research as part of 128 129 their everyday studies (Jenkins and Healey 2005; Healey and Jenkins 2009). However, the 130 extent to which these pedagogies have been adopted is variable (Wagner, Garner, and 131 Kawulich 2011). This is partly due to the limited recognition gained for those who go beyond the standard practice of including contemporary knowledge in their teaching (Healey 132 133 2000) but more widely there is evidence of inadequacies in the training of those responsible for teaching research skills (MacInnes 2010; British Academy 2012). If this is an area for 134

135 concern for university-based HE lecturers, as we will go on to consider, the implications of

136 this situation could be significant for college-based HE lecturers.

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138 Research methods teaching has therefore become a site of contention. Although the benefits

139 of integrating research methods teaching into curriculum are firmly established, rarely does

140 this happen (MacInnes 2010; Rice et al. 2001). Frequently research methods are taught as

standalone modules to large cohorts of students in preparation for their dissertations (Benson

142 and Blackman 2003). Teaching research methods in this way creates a false perception of research methods equating to a technical skill, particularly with respect to quantitative 143 research method (Benson and Blackman 2003; MacInnes 2012). Students taught using this 144 approach demonstrate limited awareness of the relevance of research methods to other 145 aspects of their degree programmes, creating future problems when required to apply this 146 knowledge in the workplace (MacInnes 2012). This has been recorded as been particularly 147 acute with social science graduates (Rice et al. 2001). A further consequence of standalone 148 149 delivery was exemplified by a study which examined the teaching and learning of this subject 150 with Sociology students. They demonstrated resistance to learning about research methods, particularly quantitative data, although the use of quantitative research methods had been 151 widespread in the degree as a whole (Williams, Collett and Rice 2004). Similar studies have 152 recorded a preference amongst students to write essays rather than analyse data, highlighting 153 factors such as disinterest, anxiety and a lack of confidence with respect to the use and 154 analysis of quantitative research methods (MacInnes 2012; Williams et al. 2008; Shober et al. 155 2006). 156

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# 158 **Research methods in college-based HE**

159 The situation surrounding research methods teaching in universities has been described as representing the cultural marginalisation of the subject within the social sciences (MacInnes 160 161 2010, 16). It is important to be aware of this when examining the teaching of research methods in college-based HE. Colleges are frequently described as centres of teaching and 162 163 vocational education, where primary research is generally associated with the advancement 164 of knowledge within a university context, and referenced by students in support if their 165 studies (Child 2009). Research, therefore, is not an activity widely engaged with by FE lecturers. Studies have examined the challenges for those staff wishing to become research 166 167 active in support of their HE teaching, with the challenges lecturers face been widely documented (Turner et al. 2009; Young 2002; Anderson et al. 2003). However, although 168 Child (2009) and others make reference to student engagement with 'research' little is known 169 regarding the form of this research, how and where it takes place and the contribution it 170 171 makes to students development. 172

As in university-based HE, curriculum space is restricted; indeed, curriculum space in the FD is pressured given the diverse entry profiles of students which mean they often need support in developing their study skills, the academic-vocational crossover, and the dual end points of

176 employment or further study (QAA 2010). The majority of FD graduates progress on to 177 further study; the 2012-13 Destination of Leavers from HE data indicated that whilst only 14% of graduates from a full degree engaged in further study following graduation, 48% of 178 FD students moved on to higher study (HESA 2014). Therefore there is a clear requirement 179 180 for FD providers to prepare students for 'topping up,' as well as offering sufficient support for those with a desire to move directly into the workplace. Part of this preparation will 181 include developing their knowledge of research methods to support dissertation level work. 182 183 184 The vocational focus of colleges could represent an additional pressure impact on the

allocation of curriculum space to research methods (Bathmaker 2013; Lea and Simmons 185 2012). Vocational education, and therefore the knowledge base it draws upon, is based on a 186 discourse of workplace readiness with the emphasis placed upon the development of skills 187 rather than knowledge (Bathmaker 2013). These 'skills' can be interpreted as representing 188 (measureable) abilities relating to activities such as communication, numeracy, computer 189 190 literacy, and to a range of interpersonal or generic attributes that can be transferred to a 191 number of professional contexts (DfCSF 2009). Recent research (e.g. Bathmaker, 2013; 192 Guile, 2010) has again acknowledged the importance of theoretical knowledge within the 193 sphere of vocational education. In the context of vocational education, theoretical knowledge is contested; it is commonly referred to as abstract and perceived as removed from the skills 194 195 focus of many FE colleges (Bathmaker 2013; Doyle 2003). Theoretical knowledge underpins 196 the appropriate application of research methods and analysis of resulting data, therefore 197 explicit consideration of the theoretical foundations of research is essential. However, little is 198 known as to how this aspect of research methods training is addressed in college-based HE, 199 and given the concerns of Bathmaker (2013) and Doyle (2003) this is an area that warrants 200 further attention. 201 Critical engagement with knowledge, and critical thinking, are skills integral to higher 202

203 education (Lea 2014). They relate to students abilities to solve problems and address

204 questions or challenges. It goes beyond the simple acquisition of facts to decision making,

- 205 experimentation, evaluation, integration and synthesis, all skills that are employed in
- research, and therefore fundamental to the teaching of research methods (Lea 2014; Rippen et

al. 2002). As we will go on to explore, these are skills that can be difficult for students to

208 comprehend and develop as students can perceive them as abstract and they need to be

- 209 supported by pedagogic techniques that stimulate higher-level learning (Jenkins & Healey
- 210 211

2005).

A further consideration is the background of college-based HE lecturers. Commonly college-212 213 based HE lecturers have a diverse professional profile, in that they entered teaching from employment, with their professional knowledge and skills leading to them securing a 214 teaching role in a college (Turner et al. 2009). Progression into HE teaching is a consequence 215 of 'circumstances' in many cases (Turner et al. 2009). This means that the base on which 216 217 they develop their HE teaching may be largely informed by their FE experiences, and, as noted above, given the low profile of research in colleges, the opportunities for HE lecturers 218 to develop their knowledge of this area can be restricted. 219 220 221 Based on the evidence presented above, the position of research methods teaching in college-

based HE varies widely. In some colleges the role of research methods teaching could be 222 emergent, whereas in others it may be contested and in others, firmly established. By 223 224 undertaking this national level study we sought to provide insights into the situation regarding research methods teaching and learning in English FE colleges and the experiences 225 226 of both staff and students in engaging with this part of the curriculum. Questions on the critical engagement with knowledge, institutional support for research and scholarship and 227 228 the dual sector remits of vocational and academic education in the college environment are 229 integral to this study.

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#### 231 Methodology

232 Following an in-depth review of literature relating to research methods and pedagogies of research methods teaching two questionnaires were designed, one for completion by students 233 234 and a second to be completed by lecturers involved in teaching research methods and programme leads. Each questionnaire captured demographic information (e.g. gender, age). 235 The student questionnaire was split into five sections. Through section one contextual 236 information (e.g. college name, programme studying, level / mode of study, background 237 qualifications) were collected. In section two we used a four-point Likert scale (strongly 238 239 agree to strongly disagree, with an additional opt out category) to capture students reactions to a number of statements regarding different research methods potentially encountered 240 during their studies. Section three used a series of yes / no response questions to gauge 241 students' awareness of methodological concepts. Next we explored preferred methods of 242

243 learning about research methods and the resources (e.g. library / software) available to support their learning. Finally we captured their confidence in undertaking both qualitative 244 and quantitative research using a 10 point scale. The staff questionnaire again captured 245 contextual information (e.g. role, proportion of teaching at HE level, disciplinary area), 246 section two explored the delivery of research methods teaching and assessment, section three 247 248 used a four-point Likert scale (strongly agree to strongly disagree, with an additional opt out category) to examine their knowledge and confidence in teaching research methods. Finally 249 250 we explored the resources available to support their teaching and also engage with / develop 251 their capacity as researchers. In this final section several open questions were included which 252 sought to capture further information to inform the second stage of data collection.

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Each questionnaire was piloted with further refinements made as a result of feedback. The 254 questionnaires were administered using Survey Monkey and available for completion 255 between the 8<sup>th</sup> March and 14<sup>th</sup> April 2013. In order to gain insights into research methods 256 teaching across college-based HE in England, we distributed the surveys extensively through 257 partnership email lists in the South and North West and via groupings such as the Association 258 for Collaborative Provision of Higher Education in England, the Staff and Educational 259 260 Development Association, Universities Council for the Education of Teachers HE in FE group and the college-based HE mailing lists of the HEA. As the organisation and role of 261 262 college-based HE varies across the four nations of the UK (Gallacher et al., 2006), we took the decision to focus specifically on provision in England. Although this may be seen as 263 264 geographically limiting the scope of the study, it provides congruence with the organisational 265 parameters of education policy in England.

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A total of 162 respondents were yielded from the lecturer questionnaire and 127 respondents 267 for the student survey. Whilst we acknowledge this is a small response rate for the student 268 survey, given the short timeframe over which the survey was open, and also the provisional 269 nature of this study we felt this was sufficient to provide initial insights into this under 270 researched area. Student response rates to on-line surveys are lower, even when incentivised, 271 272 than paper-based surveys (Nulty, 2008). However, on-line administration does have clear 273 advantages with respect to reaching diverse sample populations and broad geographic 274 coverage. With respect to the staff survey, again, the overall size of the sample population is not known, but in 2011 the HEA had approximately 1,000 managers, lecturers and support 275 staff registered on its national college-based HE mailing list (Outram, pers. comm.) therefore 276

if we use this a guide, we have a response rate that aligns with comparable studies in this area(e.g. Brew et al., 2011).

279

The disciplinary groupings designated by the HEA were used to identify respondents from 280 281 the social sciences. Qualitative responses were analysed thematically with members of the research team independently reviewing data, developing codes and then coming back 282 together to refine these (Silverman 2011). The outcomes of this analysis formed the basis of 283 two focus groups, which were used to corroborate findings emerging from the questionnaire 284 285 around research methods teaching, training and staff development in support of research / research methods teaching and allow greater exploration of these findings with college-based 286 HE practitioners (Silverman 2011). Nine participants for the focus groups were purposefully 287 selected from those who volunteered to contribute further to the research following 288 completion of the questionnaire. We selected participants to encompass a range of social 289 science disciplines and ensured we included those in lecturing and management positions. 290 The focus groups were held in two different locations in order to maximise participation and 291 292 ensure we gained representation from a range of college-based HE providers. Each focus 293 group lasted for approximately one hour and was audio-recorded, transcribed verbatim and 294 subsequently analysed using the same approach as the qualitative questionnaire responses. The message wall was implemented as a response to many staff expressing interest in the 295 296 project but being unable to participate in focus groups. In total, 17 participants engaged with 297 the message wall discussions which ran from May until June. In reporting these data we 298 indicate the source using the following coding: QU – questionnaire, FG – focus group and 299 MW – message wall.

300

301 **Results** 

### 302 College-based HE lecturer responses

# 303 **Profile of respondents**

College-based HE is hugely variable in size; HEFCE (2003) guidance sought to
accommodate this by suggesting the development of infrastructure and resources to support
HE teaching should be informed by the presence of a 'critical mass' of HE provision. Given
that we obtained responses from lecturers employed at 55 colleges, and obtained their college
name, we were able to examine the pedagogies and resourcing of research methods teaching
with respect to college size. We drew on data compiled by HEFCE using HESA and ILR
records, an approach used in similar studies (e.g. Parry et al. 2012) to categorise college size

according to HE student numbers. Respondents were then attributed to one of the following
categories: 1000+, 500-999 and 1-499 (Table 1).

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314 [Place Table 1 here]

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As discussed, many college lecturers enter teaching from what could be referred to as a non-316 traditional route. Considerable time may have passed since they themselves undertook their 317 own undergraduate studies / conducted any research. Therefore the currency of their 318 319 knowledge regarding research methods, and also more recently the software developed to support research activities, may be variable (Turner et al. 2009). The majority of our 320 respondents fall in the 40-49 and 50-59 age categories (Table 2) therefore there is the strong 321 likelihood that staff development is necessary to ensure currency in their knowledge and 322 pedagogic practice. This issue is explored in further detail below. 323

324

325 [Place Table 2 here]

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# 327 Research methods teaching

328 Respondents were presented with a comprehensive list of 'subjects' that could be taught in order to develop students' knowledge and competencies with research methods (Table 3). It 329 330 is noteworthy that lecturers concentrated on 'literature searching' and 'qualitative research methods' with 'reporting research', 'quantitative research methods' and 'research paradigms' 331 332 receiving least attention (Table 3). This was not unanticipated, in a limited curriculum space 333 which is expected to incorporate a vocational dimension; these theoretically driven aspects of 334 curriculum are likely culprits for elimination. But it is likely to have implications for the development of higher-level, problem solving which is based on skills such as integrating, 335 336 synthesising and evaluating knowledge and data to reach conclusions. Literature searching and qualitative research methods were perceived as more palatable aspect of research 337 methods teaching which can be integrated amidst a framework for wider academic skill 338 development. Indeed, this was a theme emerging from the qualitative data: 339

340

341 'Research methods is "just another skill" but combines so many other areas of
342 overlapping skills, experience and knowledge. The reading of books (or not!) is my
343 major concern.' MB

Only 43.8% of respondents' include 'research paradigms' in their teaching. Research paradigms represent the foundational knowledge upon which methodological and analytical decisions should be made (Alvesson and Skoldberg 2009). Its limited coverage could mean that students are only developing a partial awareness of the research process and may be, if progressing to 'top up' their FD, lack the conceptual knowledge on which to defend their research. Focus group respondents were aware of this position and clearly struggled to reconcile this:

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'I don't think they're ready for it because I'm trying to get mine to try and work out
why they've done that project, where their values, where their beliefs come from, and
that's about as far as we can go. And some of them can question it and then they can
start to look at their assumptions and how that may impact on the research. That, at
level five, I'm finding for my students anyway, that's probably as far as we can take it
because I don't think they're ready for it.' FG

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It may also be a consequence of the skills-knowledge debate, which, as discussed above, has
seen FE colleges adopt a vocational focus to their teaching to the detriment of theoretical
aspects of the curriculum. Indeed, this is intimated at with respect to student engagement
with this subject:

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'I think it's, I would say it's to do with linking to what matters to them. If you can get
them to see the relevance to what they are core interested in then they catch. If that's
not possible then they shut off against it and it takes a long time to get back in to it.'
FG

369

370 A deficit in research methods teaching has been discussed with respect to the teaching of research methods in university-based provision (e.g. MacInnes 2012; British Academy 2012). 371 We have also considered the challenges of negative student attitudes and anxiety leading to 372 resistance amongst students to learning about this subject (Williams et al. 2008). Although 373 'reporting research' was included, only 46.6% of respondents taught this with respect to 374 375 'literature searching' (which 76.5% taught). To a certain extent there is an overlap in some of the skills drawn upon (e.g. formulating arguments, synthesising literature) in both literature 376 searching and reporting research, but the problem solving and critical thinking with respect to 377 analysing data and solving problems that are also required in the reporting of research will be 378

379 overlooked if curriculum time is concentrating on literature searching (Table 3). A number 380 of issues could be influencing the breadth of research methods integrated into college-based HE curricula. It could indicate the lack of familiarity generally with this aspect of the 381 research process as studies (Anderson et al. 2003; Schofiled and Burton 2013) have 382 383 documented a general lack of confidence and knowledge surrounding the reporting and 384 dissemination of research outcomes for college-based lecturers seeking to become research active. However, data gathered which sought to examine whether respondents had sufficient 385 386 knowledge to teach these aspects of research methods indicates that they felt they did (Table 387 4). This is clearly a complex issue, and, as we will go on to discusses, issues of currency of knowledge, curriculum space and student profiles may also be influencing practice in this 388 389 area.

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391 [Place Table 3 here]

392

393 [Place Table 4 here]

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395 Following on from this it is useful to consider the format and pedagogy of research methods 396 teaching (Tables 5 and 6). Research methods are most commonly taught as programme specific lectures, through 1:1 tutorials, in small groups or as workshops, although as Table 7 397 398 indicates there may be some variation with respect to college size. This format of teaching 399 supports the pedagogies respondents identified as commonly using e.g. independent study, 400 practical exercises and project / problem-based learning (Table 5). Both the format of 401 teaching and pedagogies employed are in line with those cited as promoting student 402 engagement and building their confidence with this subject (e.g. Benson and Blackman, 2003). In contrast to universities, college-based research methods provision appears to be 403 more programme-specific, integrated into wider teaching and learning activities, as indicated 404 through the use of approaches such as practical exercises and problem-based learning. The 405 importance of this was also considered in the focus group: 406

407

408 'I know on our foundation degree programmes the research skills, which is a level
409 four module, was originally taught lecture style to all of the students all together and
410 supported in tutorials by staff members in their specialism area. But they came from a
411 huge disparity of foundation degrees to come together to be delivered that, and it

412 wasn't necessarily for the benefit of the student, but it was definitely beneficial for the

413 bottom line. Actually that has changed recently; we've gone to a more specialist414 model.' FG

Such integration follows the recommendations of the British Academy (2012) and MacInnes
(2012) with respect to ensuring students understand both the context and application of
research methods, and evidence is emerging of this taking place with respect to research
methods been taught as part of themes central to the FD (e.g. work-based learning, employer
engagement):

421 'The Work Based Learning Unit involves submitting a proposal for one of the design
422 aspects of a sustainable building. Once the proposal has been agreed with the client /
423 employer and tutor the assignment will require research and analysis to be carried out
424 for the design aspect involved and the submission of a report on the conclusions and
425 recommendations proposed.' QU

426

As the next extract indicates, the primary consideration of the research project is vocationalrelevance:

429

430

'Students are required to propose and complete a research project that is vocationally relevant'. QU

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431

This extract is indicative of the focus on vocational or work-based learning as a driver 433 underpinning research methods teaching, which is evident throughout the data. When 434 435 combined with data relating to aspects of research methods taught/not taught (Table 3), a pattern emerges of a model of teaching that is primarily packaged as developing skills for 436 vocational tasks. This approach aligns with the requirements of FDs and ensures shared 437 curriculum space for meeting FD benchmarks, as well as the pedagogic impetus for delivery. 438 439 This observation needs to be framed alongside the non-traditional profile of FD students, and 440 the potential implications this can have with respect to students needing to learn how to learn, 441 again an issue raised within the focus groups:

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'I think, for the purpose for foundation degrees within the courses that I teach on orhave taught on, the actual process of research they don't get there yet. So we do,

- particularly in the early years foundation degree, one of the modules is about teaching
  research methods rather than actually doing it, because they're not there yet.' FG
- 447 Indeed many of the pedagogies listed in Table 6 are widely used in colleges as they are seen
- 448 as that supporting students' academic development as a whole (Turner et al., 2009). These
- 449 data have already indicated that the breadth of research methods teaching may be somewhat
- 450 limited, so whilst colleges may be employing pedagogies conducive to research methods
- 451 teaching, this finding needs to be considered alongside the limitations identified (Table 3) and
- 452 the profile of the student body.
- 453
- 454 [Place Table 5 here]
- 455 [Place Table 6 here]
- 456 [Place Table 7 here]
- 457

### 458 Engaging students with research methods teaching

459 Similar to university-based students, our data indicate engaging students with research 460 methods teaching is challenging. Although the quantitative data demonstrate that 59.5% of respondents find it easy or very easy to engage students in research methods teaching when 461 462 related to real life scenarios (Table 8), respondents found it more difficult to engage them 463 (Table 9) when framed in terms of progression or future career development. This reinforces the challenges noted around student attitudes and engagement with research methods in 464 university-based HE (e.g. McInnes, 2012; Williams et al., 2008). This is supported through 465 the qualitative data, where examples were recorded of students questioning the relevance of 466 research methods teaching, and also examples of lecturers trying to integrate research 467 468 methods to real-life scenarios to promote perceived relevance:

469

470 'There's so many transferable skills there and that's how I sell it. So I get a [...] why
471 do I have to do research, because it's [a] core module, so I sell the transferable skills
472 now, researching, in the literature being sent. I just find it quite hard, I don't know
473 about you, hard to sell it as a module, "Why do we have to do this as a core
474 module?" FG

475 'Legal research is essential, so the inclusion of primary legal sources is essential for476 all law modules. In Year 1 an initial Skills Assessment assesses students' ability in

478

finding and using primary legal sources, and in Year 2 students undertake an extended essay on a subject of their choice. The project proposal, literature review and final essay all illustrate the depth/extent of research skills.' QU

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479

481 [Place Table 8 here]

482 [Place Table 9 here]

483

The issue of student engagement aligns with the challenges identified in university settings. For colleges, who focus on meeting vocational FD requirements, we argue that there is a strategy employed in using this as a focus of research methods teaching. However, despite the generally positive attitudes towards research methods based on real-life and professional contexts, (Tables 8 and 9) there seems to be a sizable minority who still find difficulty in using the vocational levers as a stimulus:

490

491 'The idea is for them to be enthusiastic about the topic, to want to, to be, I can't
492 motivate them if I give them a question and they hate me for the year [...]. They've
493 got, and they don't like it, to actually go, "What do I want to research?" Well, this is
494 almost catch 22, isn't it?' FG

495

496 It would seem that the problems of student engagement cannot be easily remedied through 497 vocational alignment of research projects despite assumptions that this is the primary 498 motivator for college-based HE students. Perhaps the limited student engagement with research projects aligned to so-called 'real life scenarios' reflects the breadth of college-based 499 500 HE. College-based HE is widely perceived to be vocationally orientated, with students 501 working toward achieving a higher-level qualification as part of professional training or 502 preparation (Stanton, 2009). There is no natural home for research in this environment, hence the tendency to package research methods and subsequent research projects as skills based 503 around vocational settings. However, recent research demonstrated that attitudes towards 504 students' choice of HE provider are changing (HEFCE, 2013). Increasingly decisions are 505 506 made based on costs, with factors such as proximity and ability to balance wider 507 responsibilities, making the college-based HE option more attractive to a wider proportion of 508 students (Prospects, 2010). In some geographic locations (e.g. rural areas) college-based HE may be the only option as illustrated by the trend for the comparative growth of full-time HE 509 programmes in colleges (Gray and Stone, 2014). Consequently, the remit of many college-510

based HE providers has extended to include FDs that are aligned more explicitly to a specific discipline rather than been vocationally orientated. In these instances adopting an employerfocused research project or implementing research methods activities aligned to 'real-life scenarios' may have a mixed reception from students. More widely the diverse entry profile of students means that the extent to which they are confident in engaging with research

- 516 methods provision is also highly variable.
- 517

There is no easy solution to engaging students with research methods teaching, with careful 518 519 consideration of the student profile, the focus of the FD, connections to vocational and disciplinary traditions and students ambitions following graduation with respect to further 520 study or entry to the work place, all factors those responsible for teaching research methods 521 should heed. The advantage, as discussed here, for much college-based research methods 522 523 teaching is that small group / programme specific activities provides staff with the opportunity to cater for individual students. The challenge is in equipping staff with the 524 appropriate professional updating opportunities to facilitate this for their learners. 525

526

# 527 Research capabilities of college-based HE lecturers

The relationship between research and teaching within universities is an issue that has received considerable attention (Brew and Boud 1995; Healey 2000). Although sought after, researchers have been unable to provide an unequivocal link between research activity and teaching quality (Brew and Boud 1995). However, for the college-based HE lecturer a link between research activity and teaching is one that needs further consideration, particularly with respect to the integration of research methods into their teaching and ensuring the currency of lecturers' pedagogic practice.

535

Reference has already been made to the low level of research activity that takes place within FE colleges, a situation mirrored by our respondents (Table 10). Higher study (e.g. masters / PhDs) was identified as an important avenue for many to access research. But even when funding was forthcoming, respondents were reliant on their own motivation and time to undertake this work. Work which many felt was vital to the currency of their practice and central to their teaching of research methods:

542

'But it is done in our own time, rather than considered an essential part of delivering
HE qualifications.' QU

546	'OK if supported by training and development but a lack of depth within area
547	alongside a deficit in updating and development and hands-on research experience
548	can present a weakness in research methods teaching.' QU
549	

'Research methods can be difficult enough [...] without the added pressure of staff
members having no recent experience to draw on.' MW

552 [Place Table 10 here]

553

554 The lack of institutional support, recognition, a culture of discussion / ideas sharing and also a lack of knowledge about the research process (e.g. applying for funding, disseminating 555 556 research outcomes) were challenges reported by respondents. Indeed, these are barriers discussed elsewhere as hindering the development of research and scholarship in colleges 557 558 (Anderson et al. 2003; Turner et al. 2009). High teaching loads confound this situation, as 559 many FE lecturers are contracted to teach in excess of 800 hours per academic year (Lea and 560 Simmons 2012). Although HEFCE (2009) advocated the use of arrangements with a college's validating partner as a potential way of stimulating the development of scholarship 561 562 and research activity through the mutual exchange of ideas and expertise, as Tables 11 563 demonstrates, the majority of respondents were not provided with such opportunities. Given the lack of expertise within colleges and the limited opportunities provided through their 564 validating partner, this raises a potentially alarming issue regarding how college-based HE 565 lecturers can enhance their knowledge of research and scholarship, not only in support of 566 research methods teaching but also in support of their HE teaching more generally. This 567 568 issue needs to be considered alongside the finding that 99% of respondents either strongly agreed (69.7%) or agreed (29.4%) that their knowledge in research methods was gained 569 570 through their own qualifications (Table 12). Similarly, 81.9% strongly agreed or agreed that they gained this knowledge through their own professional training, and 94% through their 571 572 own practical experiences. As we intimated earlier, the age profile of our respondents (Table 573 2) indicates, that for the majority, it may have been sometime since they completed their own studies, and had first-hand experience of undertaking research. Therefore it is not only in 574 575 universities where the development and training opportunities for research methods teaching appear to be lacking (MacInnes 2010), clearly in college-based HE there is an urgent need to 576 577 also address this issue.

579 [Place Table 11 here]

580 [Place Table 12 here]

581

# 582 College-based HE student responses

583 **Profile of respondents** 

In contrast to the prevailing perception of college-based HE students studying part-time (HEFCE, 2009) the majority of respondents identified themselves as undertaking their studies full time (Table 13). This is a pattern that has been noted in similar studies (e.g. Gray and Stone 2014), and whilst not the focus of the current study does raise some questions that warrant further investigation regarding the profile of students undertaking FDs, and what has caused this shift in the modes of study.

590

591 [Place Table 13 here]

592

Whilst most respondents were studying at levels 4 and 5 (Table 13), some are studying at 593 594 level 6, (the final years of honours study) and a minority studying at level 7 (postgraduate). 595 Further analysis of these respondents indicated that they were registered on courses relating to teacher training. Whilst it was expected that most respondents would by studying FDs the 596 597 presence of level 6 respondents may be indicative of the growth of provision at this level 598 following the Browne Review. Although representing a limited number of respondents, their 599 presence further warrants the need for development of college-based HE lecturers with respect to teaching and supporting research as students studying at this level are likely to be 600 601 required to complete independent research as part of their studies.

602

603 [Place Table 14 here]

604

Indeed further evidence emerged regarding this issue through questioning around the software packages students used to analyse research data (Table 15). Although there has been proliferation in software to support data analysis, respondents indicate limited experience of software beyond those readily available through Microsoft (e.g. Excel / Access) (Table 15). The more specialist forms of analytical software that may be better designed, or knowledge of may be desired by employers were rarely encountered. Further investigation is necessary, but was beyond the scope of the current study, to explore why students have 612 limited experience of these other packages. However, based on the data obtained relating to

the research development of college-based HE lecturers, and literature relating to research

methods teaching in university-based HE (e.g. Coombs & Rybacki 1999; MacInnes, 2009),

this is likely to be owing to a combination of factors of which cost is likely to be the

616 contributing factor.

617

618 [Place Table 15 here]

619

# 620 Conclusion

621

This research provides initial insights into the teaching of research methods within the social 622 sciences, considering practice, attitudes and culture surrounding its delivery in college-based 623 HE in England. Parallels are emerging between college and university provision in relation to 624 the resourcing and support of RM teaching; however the focus of these issues is determined 625 by the structural and cultural foundations of different institutions. Within colleges the 626 resourcing implications are those relating to fundamental requirements such as software and 627 training, as well as a commitment to higher academic qualifications as a basis for staff 628 629 engagement with research. There are related issues on the place of research as an expected activity of staff and whether it is considered to be of value in developing the capacity of staff 630 631 in research methods teaching.

632

633 Small group teaching and a range of integrated pedagogies have often been cited as a distinct 634 feature of college-based HE and this aspect of resourcing is evident within the data. Larger 635 colleges show a greater tendency toward stand-alone delivery, as opposed to integration of research methods across provision. An integrated approach would seem to be more common 636 where a smaller body of HE provision exists. One assumption is that we are observing 637 economies of scale, where smaller providers can rationalise programme-specific (and more 638 integrated) forms of research methods teaching, with small cohorts not supporting the 639 amalgamation of research methods teaching. This is an area which would benefit from further 640 investigation. 641

642

Another issue emerging from this research relates to the constrained curriculum space for
 research methods teaching. This is an area we were only able to make provisional inferences
 regarding, and warrants further consideration particularly with respect to reviewing and

mapping research methods curricula. Such work could substantiate the emerging findings 646 regarding the attention given to different aspects of research methods teaching (e.g. literature 647 searching, theoretical foundations and reporting research), and where this fits with the range 648 of subjects and skills FDs are required to include. As a two year degree with a vocational 649 benchmark requirement we became aware of the pressures faced in curriculum development. 650 This is presented alongside the requirements necessitated for the large numbers of students 651 who use the FD as an articulation route to a level six honours degree. These multiple 652 653 requirements in terms of skills and knowledge means that research methods are pragmatically 654 translated as a vocationally based project within many programmes. The implications of this are demonstrated in some of the empirical findings on lower levels of theoretical and 655 conceptual engagement with research. This may have implications for students progressing to 656 level six programmes where there is less emphasis on vocational practices as the foundation 657 of knowledge than within the FD. 658

659

660 One of the assumptions that can be increasingly challenged is the role of college HE as

exclusively catering for a brand of vocational HE. These assumptions can also viewed

alongside the demographic profile of college HE students, which remains grounded in

663 notions of widening participation. The accessibility of college HE provision means that it is

not only a location for vocationally orientated qualifications, but an institution that offers a

route into HE, or simply a more local and flexible version of HE. Discussions of academic

drift (Neave 1979; Garrod and Macfarlane 2009) or the purpose of the college (Wheelahan

667 2009) aside, if college-based HE is to grow and fulfil multiple functions then aspects of

668 curriculum such as research methods remain central concerns for practice notwithstanding the

669 emphasis on vocational and work-based learning that has been associated with this

- 670 development.
- 671

# 672 **References**

Alvesson, Mats, and Kaj Skoldberg. 2009. *Reflexive Methodology*. 2nd ed. London: Sage.
Anderson, Graham, Madeleine Wahlberg, and Sue Barton. 2003. Reflections and experiences
of further education research in practice. *Journal of Vocational Education & Training*55 (4):499-516.

- 55 (4):499-516.
  Bathmaker, Ann-Marie. 2013. Defining 'knowledge' in vocational education qualifications in
  England: an analysis of key stakeholders and their constructions of knowledge,
- purposes and content. *Journal of Vocational Education & Training* 65 (1):87-107.
  Bathmaker, Ann-Marie, and James Avis. 2005. "Becoming a lecturer in further education in
- Bathmaker, Ann-Marie, and James Avis. 2005. "Becoming a lecturer in further education in
   England: the construction of professional identity and the role of communities of

682	practice. Journal of Education for Teaching: International research and pedagogy 31
683	(1):47-62.
684	Bathmaker, Ann-Marie, Greg Brooks, Gareth Parry, and David Smith. 2008. Dual-sector
685	further and higher education: policies, organisations and students in
686	transition. <i>Research Papers in Education</i> 23 (2):125 — 37.
687	Benson, Angela, and Deborah Blackman. 2003. Can Research Methods Ever Be Interesting?
688	Active Learning in Higher Education 4 (1):39-55.
689	Blunkett, David. Speech on Higher Education delivered at Maritime Greenwich University.
690	Accessed 18/10/10. http://cms1.gre.ac.uk/dfee/#speech.
691	Brew, A., Boud, D., & Namgung, S, U. (2011). Influences on the formation of academics:
692	the role of the doctorate and structured development opportunities. Studies in
693	Continuing Education 33 (1): 51-66.
694	Brew, Angela, and David Boud. 1995. Teaching and Research: Establishing the Vital Link
695	with Learning. <i>Higher Education</i> 29 (3):261-73.
696	British Academy. 2012. Society Counts. Accessed 6th November.
697	http://www.britac.ac.uk/policy/Society_Counts.cfm
698	Browne, John. 2010. Securing a Sustainable Future for Higher Education: An Independent
699	Review of Higher Education Funding and Student Finance. London.
700	Burton, Fran, and Cathy Schofield. 2011. Student confidence in using and applying research
701	methods whilst studying within a sport and exercise discipline. Journal of Applied
702	Research in Higher Education 3 (1):15-27.
703	Child, Sue. 2009. Differing relationships to research in higher and further education in the
704	UK: a reflective account from a practitioner perspective. Research in Post-
705	Compulsory Education 14 (3):333 — 43.
706	Dearing, Ron. 1997. National Committee of Inquiry into Higher Education – Report of the
707	National Committee. HMSO: London.
708	Department for Business Innovation and Skills. 2011. Higher Education: Students at the
709	Heart of the System. Edited by Department for Business Innovation and Skills.
710	London: HMSO.
711	Department for Children Schools and Families. 2009. The Work-Related Learning Guide.
712	Nottingham.
713	Department for Education and Employment. 2000. Foundation Degrees: a consultation
714	document., edited by DfEE. London.
715	Department for Education and Skills. 2003. <i>The Future of Higher Education</i> . Edited by
716	DfES. Norwich.
717	Doyle, Mike. 2003. Discourses of Employability and Empowerment: Foundation Degrees
718	and 'Third Way' discursive repertoires. Discourse: Studies in the Cultural Politics of
719	<i>Education</i> 24 (3):275 — 88.
720	Esmond, Bill. 2012. 'I don't make out how important it is or anything': identity and identity
721	formation by part-time higher education students in an English further education
722	college. Journal of Vocational Education & Training 64 (3):351-64.
723	Gallacher, Jim, Robert Ingram, and Fiona Reeve. 2006. "Differing national models of short
724	cycle, work-related higher education provision in Scotland and England." Glasgow:
725	Centre for Research in Lifelong Learning, Glasgow Caledonian University.
726	Garrod, Neil, and Bruce Macfarlane. 2009. "Further, Higher, Better?" In Challenging
727	Boundaries, edited by Neil Garrod and Bruce Macfarlane. Abingdon: Routledge.
728	Gray, Claire, and Mark Stone. 2014. Voices From Across Collaborative HE Provision
729	Plymouth: ACP.
730	Greenbank, Paul. 2007. From foundation to honours degree: the student experience.
731	Education and Training 49 (2):91-102.

- Healey, Mick. 2000. Developing the Scholarship of Teaching in Higher Education: A
  discipline-based approach. *Higher Education Research & Development* 19 (2):16989.
- Healey, Mick, and Alan Jenkins. 2009. Developing undergraduate research and inquiry.
   York: Higher Education Academy.
- HESA. 2014. Destinations of leavers from higher education in the United Kingdom for the
   academic year 2012/13: accessed 20<sup>th</sup> November 2014.
   https://www.hesa.ac.uk/pr/3233-statistical-first-release-205
- Higher Education Funding Council for England. 2002. Types of foundation degrees: a case
   study approach, report to HEFCE by the FD support team. Bristol: Higher Education
   Funding Council for England.
- 743 . 2006. Higher education in further education colleges: consultation on HEFCE
   744 policy. *HEFCE Policy Developments*. Bristol.
- 745 . 2013. Higher Education in England. Impact of the 2012 Reforms. Bristol: HEFCE
- Jenkins, Alan, and Mick Healey. 2005. Institutional strategies to link teaching and research.
   York: Higher Education Academy (HEA).
- Jenkins, Alan, Mick Healey, and Roger Zetter. 2007. Linking teaching and research in
   disciplines and departments. York: Higher Education Academy (HEA).
- Lea, John. 2014. Capturing HEness in College Higher Education. SEDA Special Publication:
   Supporting Higher Education in College Settings.
- Lea, John, and Jonathan Simmons. 2012. Higher education in further education: capturing
   and promoting HEness. *Research in Post-Compulsory Education* 17 (2):179-93.
- Leese, Maggie. 2010. Bridging the gap: supporting student transitions into higher education.
   *Journal of Further and Higher Education* 34 (2):239-51.
- MacInnes, John. 2010. Proposals to Support and Improve the Teaching of Quantitative
   Research Methods at Undergraduate Level in the UK. Swindon: ESRC.
- 2012. Quantitative Methods teaching in UK Higher Education: The state of the field
   and how it might be improved. *HEA Social Sciences teaching and learning summit: Teaching research methods*. Radcliffe House, University of Warwick.
- Neave, Guy. 1979. Academic drift: Some views from Europe. *Studies in Higher Education* 4 (2):143-59.
- Nulty, D.D. 2008. The adequacy of response rates to online and paper surveys: what can be
   done? Assessment and Evaluation in Higher Education 33 (3): 301-314.
- Parry, Gareth. 2006. Policy-Participation Trajectories in English Higher Education. *Higher Education Quarterly* 60 (4):392–412.
- 767 . 2009. Higher Education, Further Education and the English Experiment.*Higher* 768 *Education Quarterly* 63 (4):322–42.
- 2010. Differentiation, competition and policies for widening participation. In
   *Improving Learning by Widening Participation in Higher Education*, edited by
   Miriam David. Abingdon: Routledge.
- Parry, Gareth, Penny Blackie, and Anne Thompson. 2009. Supporting higher education in
   further education colleges. Policy, practice and prospects. HEFCE.
- Parry, Gareth, Peter Scott, Clare Callender, and Paul Temple. 2012. Understanding Higher
  Education in Further Education Colleges. In *Research Paper number 69*. London:
  Department for Business Innovation and Skills.
- Prospects. 2010. HND and foundation degree an overview. *Graduate Prospects*, Accessed
   18/10/10.
- http://ww2.prospects.ac.uk/cms/ShowPage/Home\_page/What\_did\_2005\_graduates\_d
   o\_/HND\_and\_foundation\_degree\_editorial/p!egiLFLc.

781 Quality Assurance Agency. 2010. "Foundation Degree qualification benchmark." Edited by QAA. Gloucester. 782 Reay, Diane, Gill Crozier, and John Clayton. 2010. 'Fitting in' or 'standing out': working 783 784 class students in UK higher education. British Educational Research Journal 36 785 (1):107-24.Rice, R., P Burnhill, M Wright, and S. Townsend. An enquiry into the use of numeric data in 786 787 learning & teaching: Report and Recommendations for UK higher education. Edinburgh: University of Edinburgh. 788 Rippen, A., Booth, C., Bowie, S. & Jordan, J. 2002. A complex case: using the case study 789 790 method to explore uncertainty and ambiguity in undergraduate buisness education. 791 Teaching in Higher Education 7 (4): 429-441. Robertson, David. 2002. Intermediate-level qualifications in higher education: an 792 international assessment. A report to the HEFCE. Bristol: HEFCE. 793 794 Schofiled, Cathy, and Fran Burton. 2013. An investigation into higher education student and 795 lecturer view on research publication and their interest in the production of a college partnership science journal. Innovations in Education and Teaching International. 796 Shober, B, P Wagner, R. Reimann, M Atria, and C Spiel. 2006. "Teaching research methods 797 798 in an internet-based blended-learning setting." Methodology 2 (2):73-82. 799 Silverman, David. 2011. Interpreting Qualitative Data. 4th ed. London: Sage. Stanton, Geoff. 2009. A View fromWithin the English Further Education Sector on the 800 801 Provision of Higher Education: Issues of Verticality and Agency. Higher Education 802 Quarterly 63 (4):419-33. Tait, Hilary, and Helen Godfrey. 2001. Enhancing the Student Experience for Direct Entrants 803 804 to the Penultimate Year of Undergraduate Degree Programmes. Journal of Further 805 and Higher Education 25 (2):259-65. 806 Turner, R, L McKenzie, and M Stone. 2009. "Square peg - round hole": the emerging professional identities of HE in FE lecturers working in a partner college network in 807 south-west England. Research in Post-Compulsory Education 14 (4):355 - 68. 808 Wagner, Claire, Mark Garner, and Barbara Kawulich. 2011. The state of the art of teaching 809 research methods in the social sciences: towards a pedagogical culture. Studies in 810 *Higher Education* 36 (1):75-88. 811 Wheelahan, Leesa. 2009. Post-secondary Education and Social Justice. Challenging 812 Boundaries: Managing the Integration of Post-Secondary Education edited by Neil 813 Garrod and Bruce Macfarlane. Abingdon: Routledge. 814 Williams, M., C. Collett, and R Rice. 2004. Baseline Study of Quantitative Methods in 815 816 British Sociology. Birmingham / Durham, C-SAP/BSA. Williams, M., G. Payne, L. Hodgkinson, and D. Poade. 2008. Does British Sociology Count?: 817 Sociology Students' Attitudes toward Quantitative Methods. Sociology 42 (5):1003-818 819 21. 820 Young, Michael. 2008. Bringing knowledge back in. From social constructivism to social realism in the sociology of education. London: Routledge. 821 Young, Pat. 2002. Scholarship is the word that dare not speak its name' Lecturers' 822 Experiences of Teaching on a Higher Education Programme in a Further Education 823 824 College. Journal of Further and Higher Education 26 (3):273 — 86. 825 826 827 828