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Qualitative Research Methods in the Living Lab: Reflecting upon a Learning and Teaching Approach for Promoting Psychological Literacy

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Abstract

This report describes and reflects upon an approach to embedding psychological literacy within the core Research Methods curriculum in a small university in the United Kingdom. Psychology students were involved in the ‘Living Lab: Feeding the Campus’ project, an interdisciplinary network of students and staff aiming to find solutions for local issues of direct relevance to students’ lives. The Living Lab focused on understanding and improving the campus food system in the context of ecological justice. Undergraduate psychology students participated through the Qualitative Research Methods, a compulsory second-year module. Psychology students conducted interview studies related to food topics such as poverty, identities and culture, community gardens, waste, sustainable lifestyles, and activism. Students collected data on campus to examine food-related experiences within the university community. Findings are being used to inform changes in the university. In this report, we describe the first iteration of involving psychology students in the Living Lab. Our approach involved an authentic assessment, participation in events and fieldtrips and interdisciplinary collaboration. We combine insights from student feedback with staff reflections on its implementation and impact. Finally, we discuss the potential of using research methods modules as a way to facilitate psychological literacy.

Keywords

Psychological literacy, authentic assessment, just and sustainable future, research methods, ecological justice

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Introduction

In a world of multiple and intertwined crises, preparing undergraduate students to address societal challenges should be a requirement for any course. Psychology has a key role to play in addressing the critical issues the world is currently facing (Kontopodis & Jackowska, 2019; Rosales & Majzler, 2023). For students, understanding and trialling how psychology can be applied to global and local challenges is vital to the development of psychological literacy (e.g., Cranney et al., 2022), and there is a need for innovative approaches that help prepare them to work with others in finding solutions for current and future societal challenges.

Although various definitions exist in the literature, psychological literacy can be broadly understood as the capacity to apply knowledge and skills specific to the discipline across contexts (Boneau, 1990; Cranney et al., 2022). McGovern et al.'s (2010) influential multi-componential conceptualisation characterises psychological literacy through core competencies that psychology graduates should develop, encompassing discipline knowledge and its application, modes of thinking, ethical behaviour and transferable skills. In contrast, "general" category definitions of psychological literacy (Cranney et al., 2012; Morris et al., 2021) tend to be values-driven, emphasising above all the application of psychology to achieve "personal, occupational and societal goals" (Hulme & Cranney, 2021, p. 7). Relatedly, McGovern et al.'s (2010) "psychologically literate citizen" is conceptualised as a person who intentionally uses their psychological literacy for societal good. We adopt this "general", values-driven conceptualisation of psychological literacy in this

report. There is an increasing need for psychology educators to articulate the value of the undergraduate study of psychology both for the student and for society. Designing curricula that facilitate students' ability to apply their psychological knowledge to societal problems and evaluating the efficacy of these innovations for the development of psychological literacy is an important first step.

In the United Kingdom, in recent years, increasing weight has been given to graduate employability in assessing the value of university degrees (Office for Students, 2022). A key metric in this regard is the proportion of graduates of a given programme who are in professional employment or further study 15 months after completing their degrees, which national data indicate to be relatively low for psychology graduates (Sanderson et al., 2022; Woolcock & Ellis, 2021). A large majority of students embark upon psychology degrees, intending to pursue a career related to mental health. However, the proportion of graduates who progress into professional psychologist training programmes remains low across the United Kingdom (Palmer et al., 2021; Sutton, 2008). A focus on psychology-specific career pathways within degree programmes may limit students' awareness of the wide range of employment options open to psychologically literate graduates (Sanderson et al., 2022). Further, many psychology students do not understand what psychological literacy is or how they are developing it through their studies (Harris et al., 2021). Therefore, there is a strong rationale for providing students with opportunities to apply their developing psychological skills and knowledge to societally and occupationally relevant issues beyond those traditionally associated with the discipline in preparation for their post-graduation working lives (e.g., van Lange et al., 2018).

One way to incorporate socially relevant issues in the psychology curriculum is through assessments that have a clear social value, "not just perpetuating what already exists but propelling us on to a better future for all" (McArthur, 2023; p. 23). The societal meaning of the assessment should be highlighted, with the function of developing students' agency to apply what they have learned in

their courses to professional and social roles, including as the citizens of the society they will become (Kreber, 2013; Ramezanzadeh et al., 2017).

In this report, we describe and reflect on an approach applied to teaching qualitative research methods within a psychology undergraduate course at York St John University (YSJ) located in England, United Kingdom. Starting from our reflections on the process of involving psychology students in 'Living Lab: Feeding the Campus', a wider cross-campus and interdisciplinary project, we describe our approach, discuss its limits and potentialities and how to overcome some of the challenges we have faced. The result of a collaborative process, this report brings the perspectives of the module leader (first author), the head of department (second author), the coordinator of the Living Lab (third author), and the facilitator of interdisciplinary collaboration (fourth author). Our reflections are informed by students' perspectives collected through the mid-module evaluation, open-ended questions at the end of the academic year, and informal feedback received in the lectures and workshops throughout the semester.

This report is organised as follows. Firstly, we describe the context – university and living lab project – where we implement our approach. Secondly, we describe the main features of our approach to teaching qualitative research methods. Thirdly, drawing upon student feedback and staff notes, we reflect on the potential of our approach to enhance students' psychological literacy. Finally, we end with some discussion notes on the limitations and opportunities of our approach.

York St John University Living Lab

In 2021, at YSJ – a small university in the north of England, UK – a group of academic faculties started to work together with students, staff members, and local actors to address local issues with local and global implications. This collaborative work has been done through Living Lab projects. As virtual or physical spaces of experimentation (Bergvall-Kåreborn & Ståhlbröst, 2009), Living Labs bring together different expertise and actors to investigate (and solve) real-world challenges (Hossain et al., 2019). The action-learning dimension of Living Labs suggests they may constitute an ideal setting for student development of research skills. At YSJ, the Living Lab takes the form of an interdisciplinary network of students, staff, external and community organisations, activists, and the local council (Heinemeyer et al., 2022). The Living Lab aims to provide opportunities for students and staff members to engage with local and campus-relevant issues and contribute to the development of local-grounded solutions. Inspired by principles of participatory action research (e.g., Fine & Torre, 2022), the YSJ Living Lab aims to engage students in researching issues of direct relevance to their lives with the aim of effecting change.

Initially proposed by staff members engaged in an interdisciplinary research group focusing on ecological justice, previous research by Cunningham et al. (2023) informed the development of the Living Lab. These researchers examined students' discourse about ecological justice, concluding that there was a clear need for the development of on-campus structures and experiences to allow students to engage collectively in ecological justice issues and exert their agency beyond the individual level. The YSJ Living Lab is supported by the Institute of Social Justice and is aligned with the university's strategic commitment to social justice (YSJ, 2023a). Widening access and participation is also part of the YSJ's mission, values, strategic plan, performance metrics and overall approach to social justice, as reflected in its contextual offer scheme to applicants from groups under-represented in higher education (YSJ, 2019). This is also reflected in the profile of YSJ's students, which shows, for example, a higher proportion of students with a disability (24.4%) than the national average (15.2%) (YSJ, 2023b). As a widening participation institution, our university often attracts students who are underrepresented in higher education (e.g., low

socioeconomic backgrounds, first-generation at the university, and those living with a disability) and for whom addressing structural barriers collectively may be particularly relevant.

The pilot Living Lab at YSJ focused on air pollution and was implemented in the 2021–22 academic year during the spring semester (Heinemeyer et al., 2022). This pilot received commendations within and outside the university due to its innovative student-focused approach. For example, in 2022, the Living Lab won the Green Gown Awards in the category ‘Tomorrow’s Employees’ and was evaluated by judges as a creative and innovative project (YSJ, 2022). In the 2022–23 academic year, the Living Lab was named ‘Feeding the Campus’ and aimed to create a more sustainable and just food system on campus. The decision to focus on food was informed by conversations with students and academic and professional services staff. With global and local implications and clear social justice links (Broad, 2016), food was identified as a transversal issue, which could mobilise all departments, disciplines and structures within the university. Increased food prices and the high impact of the UK cost-of-living crisis on higher education students (Office for National Statistics, 2023), particularly those from low socio-economic backgrounds (Russell Group Students’ Unions, 2023), also suggested that food issues were particularly relevant for students. In total, during the first semester of 2022–2023, over 800 students were involved, across 25 modules in all five academic Schools of the University, together with the Catering, Estates, Student Finance and Careers and Opportunities teams. At the time we revise this report, the living lab project ‘Feeding the Campus’ is running for the second year, and a new cohort of psychology students is participating.

An Approach for Teaching Qualitative Research Methods in the Living Lab

Research methods module assessments offer an opportunity for students to engage with hands-on research and contribute to the broader environment in which they are embedded (Wagge et al., 2023). Despite multiple proposals for rethinking research methods training (e.g., Bosio & Graffigna, 2012; Gibson & Sullivan, 2012; Wiggins & Burns, 2009), research projects conducted by undergraduate psychology students rarely make any contribution beyond the classroom (Wagge et al., 2023). Research methods are often taught in relative isolation from subject content, which may contribute to lower student engagement and lack of motivation (Earley, 2014; Murtonen, 2015). We argue that due to their situated and often applied nature, qualitative research methods are particularly useful for engaging with practical and real-life problems.

Second-year psychology students enrolled on three undergraduate courses (Psychology BSc, Psychology with Counselling BSc, and Psychology with Child Development BSc) were involved in the living lab via the core module in Qualitative Research Methods. The module curriculum covers theoretical assumptions underpinning qualitative research in Psychology and a range of data collection methods and approaches to qualitative analysis. Specifically, topics covered in this module include: history, epistemology and ontology in qualitative research; ethical principles in qualitative research; generating qualitative data using interviews and focus groups; gathering naturalistic data (e.g., online data); and approaches to data analysis in psychology, including thematic and discourse analysis. The module runs for 12 weeks, with weekly lectures (2 h) and workshops (90 min). Workshops involve a set of practical activities with a small group of 20–25 students. For example, following the lecture on how to analyse data using reflexive thematic analysis, students practised coding and generating themes during the workshop. Thus, in the workshop sessions, students have the opportunity to apply the knowledge acquired in the lectures while practising relevant tasks for their main assignment: a 2500-word qualitative report. Most activities in the workshops are directly related to the

steps involved in designing, conducting and reporting a small-scale qualitative study involving interviews, which are steps involved in the assessment. In the 2022–23 academic year, this existing module curriculum was adapted for research projects within the Living Lab. In total 104 psychology students participated.

In embedding the Living Lab within this module, we prioritised three main enhancements: authentic assessment, participation in events and field trips, and interdisciplinary collaborations. Firstly, the action orientation of the Living Lab created an opportunity for authentic assessments within this module. Psychology students were required to develop their qualitative research report, focusing on one of six food-related topics: 1) food poverty, 2) identities and food culture, 3) sustainable food-related lifestyles, 4) community gardens, 5) food activism, and 6) food waste. These topics were selected by the module's team to represent different dimensions related to food sustainability (e.g., food waste), their social relevance at the time we implemented the approach (e.g., food poverty in the UK), and their potential for exploring socio-psychological dimensions (e.g., food-related lifestyles). A recommended reading list with at least an example of one published empirical article for each topic was provided, and students were encouraged to engage with psychological literature around their chosen topics. Students created 22 small research groups, chose one of these topics, and developed a research question and an interview guide. Individually, each student conducted and transcribed an interview and submitted a report discussing the findings of their research projects using thematic or discourse analysis. Food poverty (8 groups) and food waste (6 groups) were the most popular topics. However, as students could develop their own research questions, groups addressed different aspects of the same topic or addressed more than one topic. For example, some students linked the cost-of-living crisis with food waste (e.g., 'How do undergraduate students experience food waste during the cost-of-living crisis?'), while others looked at food waste from an identity perspective (e.g., 'How do university students construct their identity in relation to food waste?').

Secondly, the living lab created opportunities for participating in events, including a field trip. Several events (e.g., fairs, film screenings, debates) were organised to stimulate engagement with the topic and facilitate the interaction between students across the different modules participating in the Living Lab. Informed by previous research showing that fieldtrips have the potential to give meaning to what is being taught and help stimulate interest and motivation (Larsen et al., 2017), we planned a visit to the university community garden. Students were consulted, and community gardens emerged as a further topic they would like to see explored in the Living Lab as a psychology event. The trip was guided by two University Grounds team members. The gardeners talked about existing sustainability initiatives on campus (e.g., improving the environment for wildlife, biodiversity volunteering sessions), highlighting the importance of having students engaged in these projects. The visit ended in the community garden, a small and hidden allotment on campus that is inaccessible to most students.

Thirdly, the Living Lab also created opportunities for interdisciplinarity, which are vital when introducing environmental and climate change-related issues into the curriculum (Maier et al., 2018). Staff reflections on the previous year's Living Lab highlighted the value of interdisciplinarity and, specifically of opportunities for students from different programmes to come together to share ideas (Heinemeyer et al., 2022). This was done through core events, such as the launch event and film screenings, but also through forming 'partnerships' between modules. This led us to establish the 'Psych-Geog Collab'—a partnership between the second-year psychology core 'Qualitative Research Methods' and the second-year geography 'Society and Space' modules. There were clear synergies between the disciplinary-specific focus on research methods for psychology students and the thematic focus on how space is produced in all its forms (Lefebvre, 1991/

1974) for geography students. We decided to use a Padlet with prompts as a means of facilitating asynchronous dialogue between the students.

Psychology in the Living Lab: Student Feedback and Staff Reflections

In this section, we present a reflective analysis focused on the main features of our approach: authentic assessment, participation in events and field trips, and interdisciplinarity collaboration. Our reflections are supplemented by students' perspectives collected through the mid-module evaluation – a standardised and anonymous short survey with four close-ended questions and two open-ended questions (November 2022); an open-ended survey with seven questions related to students' experience in the module and in the Living Lab (in June 2023); and several informal conversations with students during the lectures and workshops throughout the semester. Inspired by qualitative content analysis (Schreier, 2012), we deductively identified students' comments that were related to both positive and negative views on the three themes we are reflecting upon. No demographic information was collected, and ethical approval for collecting students' feedback was obtained by the YSJ ethics committee.

Overall, participation in the Living Lab appears to have helped students to develop a broader understanding of the role of psychology. At the very least, it seems to have contributed to improved satisfaction with the module. In response to the mid-module evaluation, 81.3% of respondents strongly agreed or agreed that they were satisfied with the quality of the module. In the previous year, in which the Living Lab was not embedded in the Qualitative Research Methods module, this figure was 70.13%. While we cannot definitively attribute this improvement in student satisfaction solely to the incorporation of action research within the Living Lab, students' qualitative comments indicate that being part of this collaborative cross-university project was a distinctive, positive aspect of the module.

Authentic Assessment

The qualitative report assessment created a positive opportunity for students to apply research qualitative research methods to socially relevant issues. Overall, students appeared to enjoy the hands-on and applied dimension of the assessment, and compared to the previous year, they were more engaged with their projects and selected topics. In the workshop session in week one, for example, most students shared and related their direct (e.g., their lived experiences) and/or indirect experiences (e.g., lived experiences of friends or family members) with the research topics (e.g., food poverty). Nevertheless, a few students demonstrated concerns with the requirement to collect data with other students on the campus and centering their projects on topics around food related issues. This was expressed by one student in the mid-module evaluation, who was struggling to see the relevance of the topic to the field of psychology. Although we provided students with a list of references of published research, it may have helped if one of the initial lectures covered relevant qualitative psychological research on the topic.

The feedback received from students in the open-ended survey on the approach to assessment was, nonetheless, inspiring. Initial concerns about the compulsory participation in the Living Lab were replaced by positive evaluations: "Although at first, I found the initial assessment worrying (...), I thoroughly enjoyed this assessment." (Student, Survey). Another student highlighted the potential impact of the assessment: "positive, nice to do something close to home and with a direct impact" (Student, Survey) and the potential of having any impact on the food practices at the

university level was perceived as “a refreshing take on research, with an interactive and rewarding approach to learning.” (Student, Survey). Furthermore, some students clearly saw the transformative potential of the assessment: “Very interesting [assessment]. [The] required research enables us to engage in real life situations whilst learning new techniques.” (Student, Survey). These comments suggest that the opportunity for a hands-on and applied assessment may have also contributed to a broader understanding of the role of psychology. This was described by one of the students as follows: “It made me realise just how widespread psychology can be, it is deeply involved in everything we do, and understanding the psychological patterns and causes behind actions and beliefs allows us to improve many things in our world...” (Student, Survey). Likewise, students’ feedback suggested the work in the Living Lab changed their understanding of how psychological research can be applied to real-world problems: “It has enabled me to understand how research can be applied to real-life situations” (Student, Survey). Importantly, the ability to see their research and findings applied to real-life issues was also noticeable in their written reports. Although not a requirement, many students attempted to discuss the implications of their findings to change policies and practices at YSJ and beyond. In our view, this suggests that students saw the societal relevance of the work they were doing in the module. In future applications of this approach, it may be helpful to encourage all students to reflect on the practical implications of their research findings as a requirement for their assessment.

In terms of additional recommendations for improving the assessment, students mentioned they would like to have the opportunity to present their work: “The only recommendation I could make is that we should receive more outcomes on how the Living Lab is working and be more involved in presenting what we have found...” (Student, Survey). This comment, and informal feedback shared with the module leader during the final lecture of the semester, suggest that students were interested in learning more about the Living Lab events and activities and would have liked to have the opportunity to discuss their findings with the wider community. In fact, the results of studies conducted by psychology students were shared and discussed with the YSJ community by the module leader and one psychology student who was working as a student research assistant. Several students shared their reports, and the findings were then summarised and presented in living lab events. The module leader also read all the submitted reports and had several conversations with the Living Lab about these findings. For example, a small group of students explored students’ views on how York St John facilitates an environment for sustaining a plant-based/meat-free lifestyle. Findings suggest that students experienced many barriers, including a lack of options offered by the canteen. The living Lab has been working closely with the canteen to make changes in the YSJ’s food system, and we have started to see some changes, including an increase in the number and quality of plant-based options in the canteen.

Furthermore, while integrating the Qualitative Research Methods in the Living Lab was possible without making any fundamental changes to the curriculum, further changes may be beneficial, including a timetabled opportunity for students to present their work to the Living Lab community – and this should be part of their assessment. We argue that it is fundamental to ensure a moment where students share their results with those who may be able to implement changes at the university level. This will help students to see the impact and applicability of research to real-world problems. We also aim to develop a more continued approach in which the same students engage with the living lab across two or more semesters. For example, based on the results of interview studies, students could work on developing an intervention to address the issues identified.

Participation in Events and Field Trips

Facilitating the interaction between students from different courses and staff members constitutes a core aspect of the Living Lab approach. We argue that such opportunities are particularly important for our students who were affected by Covid-19 and subsequent lockdowns from March 2020 to December 2021. With that in mind, the Living Lab created several opportunities for students to engage with other students across departments. Despite several invitations, however, attendance at non-timetabled events was generally low for psychology students. We believe that we should have involved psychology students in the organisation of at least one of these shared events. Our experience with other modules who were participating in the Living Lab suggests that when students were involved in the decision and preparation of the event, they were more likely to join.

Furthermore, we encouraged students to engage with the Living Lab community (e.g., by joining Living Lab events) as a way of recruiting participants. This mobilised a small group of students who participated in the launch event (in October 2022) and were actively engaging with students from other departments. Yet, while we were expecting recruitment to work as a strong motivator for students to participate in interdisciplinary events and use the Living Lab virtual learning forum (which was shared by all modules involved), most students seemed to have recruited their participants using their own pre-existing networks within the university.

Despite their limited participation in shared events, feedback received suggested that participants valued the possibility of interacting with other students from outside the psychology course. For example, a student who responded to the survey mentioned that: “It was nice to (...) being able to interact with students outside of the course” (Student, Survey). Similar comments were shared in several conversations with the faculty team involved in this module. Indeed, many students positively evaluated the opportunity to participate in these events and interact with students from other courses.

As a way to increase students’ engagement with the Living Lab we have decided to organise a field trip to the community garden. Attendance on the field trip to the community garden was much higher than at most of the weekly lectures. Students shared that they did not know about the community garden and were surprised to learn that any student could be involved. To help them think about how the content of this field trip could be related to the content being covered in the module, we asked students to develop research questions inspired by the visit to the community garden. The many research questions focused on community gardening developed by students suggest that this experiential learning stimulated thinking on how the university involves students in sustainability-related issues. A small group of students (including one psychology student) who became involved in the Living Lab as research assistants and interns started collaborating closely with York St John University’s Grounds Team. For example, students were involved in constructing a wooden plank that was then placed on the campus (Peyton, 2023).

Interdisciplinarity Collaboration

Engaging in interdisciplinarity exchange may have the potential to increase students’ understanding of how to respond to societal challenges that transcend disciplinary boundaries (Golding, 2009), such as food justice and sustainability. There were several challenges in creating a meaningful partnership between the psychology and geography modules, not least the difference in cohort size, with 104 students in the psychology module and 11 in the geography module. Contributions to the Padlet were still uneven, with some students finding it difficult to ‘know what to write’ – possibly inhibited by the prospect of other students and staff with whom they

were not familiar, and potentially wider audiences of the Living Lab, viewing their contributions, despite these being anonymous. Overall, the Padlet created to facilitate the interaction between students worked better as a platform for the Psychology students to share key findings from their research projects and to share further questions these had generated than for the geography students to share theoretically informed ideas from their module within the limited space of a Padlet.

One particular strategy which was not initially planned seemed to have worked well in facilitating interdisciplinary collaboration between these two modules. The Living Lab was able to hire four paid student researchers, and fortuitously one position was filled by a student taking the psychology module and another by a student taking the geography module. These students quickly started acting as representatives between modules, bringing the two modules together. These students were instrumental in promoting the Padlet to their peers and in kick-starting some of the Padlet discussions. Their work continued in semester 2, feeding the work of other students/modules within the Living Lab.

It is interesting to note that students did not explicitly refer to opportunities for working with students from other subject areas in their feedback. In future collaborations of this kind, it would be valuable to give more centrality to the interdisciplinary exchange and align the assignments of both modules. For example, psychology and geography students could work on the same topics for their assignments and then exchange the results of their findings in a shared event. It may also be important to have an in-person timetable session so students can meet and exchange impressions about their projects.

Discussion

Overall, our reflections and students' feedback suggest the work in the Living Lab may have changed their understanding of how psychological knowledge can be applied to real-world problems. As an example of an authentic assessment (McArthur, 2023; Ramezanzadeh et al., 2017), we have demonstrated how the qualitative report project may have the potential to lead to changes in existing practices at the university level while contributing to developing students' agency to apply their research skills to societal challenges. Psychology students were part of a larger project that is still ongoing at the time we write this report. Still, the Living Lab has started to influence changes at the university level – such as having more plant-based options in the canteen or changing the location of the community garden. The work done by our psychology students helped to contribute to inform some of those changes, as have other students from other courses and modules. Further work to ensure that students are aware of the impact of their research will be important to ensure interest and engagement with the Living Lab.

While the feedback provided by students suggests our approach is promising, a systematic evaluation of the Living Lab innovation in the Qualitative Research Methods module would allow a fuller understanding of its effectiveness in increasing students' levels of psychological literacy. Levels of psychology literacy should be measured before and after students' engagement with the living lab, and qualitative approaches should be used to explore students' perspectives before and after their experience in the module. The use of focus groups, for example, could help to inform a detailed and comprehensive discussion around the potential of our approach. There is also a need to involve researchers not directly involved in the module to collect and analyse the data. The module leader tried to create a setting where students could share their positive and negative perspectives of our approach (e.g., by encouraging their views as a way to

improve our approach). It is, however, possible that power dynamics may have constrained students in sharing negative views.

There are some other ethical issues that should be considered when implementing our approach. While students have autonomy over which topic they choose to explore, there is a risk that they may choose topics that are sensitive (e.g., such as food poverty). Lectures should address how to deal with sensitive issues and ensure that no harm is done to both participants and researchers. Additionally, it is fundamental to be clear and transparent about the impact of students' research and avoid creating unrealistic expectations. While one semester is probably not enough to lead to structural changes at the university level, placed within a larger, coordinated, long-term and cross-departmental structure, the Living Lab may help to facilitate long-term and sustainable impact.

Throughout this report, we have reflected on several limitations that should be considered when applying our approach to teaching and learning qualitative research methods. Our reflections suggest that the major challenge seems to be related to engaging students beyond the module and their assessments. Many students have to balance their studies with a part-time or even full-time job, which may create some practical challenges that must be considered when organising events and activities beyond their timetables. This is particularly relevant for expanding the interdisciplinarity dimension of the Living Lab project, which is needed to address current societal challenges, such as climate change (e.g., Schipper et al., 2021). Thus, giving students more spare resources and time to engage in interdisciplinary learning is crucial. The high engagement of students being paid to participate in the Living Lab as researchers demonstrated the importance of creating structures within which students can commit energy and time beyond the minimum requirements of a module. For students who were extremely engaged the Living Lab allowed them to experience being part of a whole network, work as research assistants, interact closely with staff members and even participate in sustainability international internships. If paying students to be research assistants is not possible, there may be ways of creating opportunities for students to actively engage with the Living Lab through, for example, work placements and accredited internships.

In a university like ours, where most students are first-generation university students, these experiences may have transformative potential. The challenges we are now facing as a society require that universities are able to facilitate such transformative experiences and that psychology undergraduate courses truly embed psychology literacy in the curriculum. We hope our learning and teaching approach, 'Qualitative Research Methods in the Living Lab', inspires other institutions to use Living Lab projects to facilitate students' engagement with local challenges.

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References

- Bergvall-Kåreborn, B., & Ståhlbröst, A. (2009). Living lab: An open and citizen-centric approach for innovation. *International Journal of Innovation and Regional Development*, 1(4), 356–370. <https://doi.org/10.1504/IJIRD.2009.022727>
- Boneau, C. A. (1990). Psychological literacy: A first approximation. *American Psychologist*, 45(7), 891–900. <https://doi.org/10.1037/0003-066X.45.7.891>
- Bosio, A. C., & Graffigna, G. (2012). ‘Issue-Based research’ and ‘process methodology’: Reflections on a post-graduate master’s programme in qualitative methods. *Psychology Learning & Teaching*, 11(1), 52–59. <https://doi.org/10.2304/plat.2012.11.1.52>
- Broad, G. (2016). *More Than Just Food: Food Justice and Community Change*. University of California Press. <https://www-jstor-org.yorks.j.idm.oclc.org/stable/10.1525/j.ctt19b9jf9>
- Cranney, J., Botwood, L., & Morris, S. (2012). National Standards for Psychological Literacy and Global Citizenship: Outcomes of Undergraduate Psychology Education, 2012 Final Report. *ALTC/OLT National Teaching Fellowship*. https://groups.psychology.org.au/assets/files/cranney_ntf_final_report_231112_final.pdf.pdf
- Cranney, J., Dunn, D. S., Hulme, J. A., Nolan, S. A., Morris, S., & Norris, K. (2022). Psychological literacy and undergraduate psychology education: An international provocation. *Frontiers in Education*, 7, (790600), 1–7. <https://doi.org/10.3389/feduc.2022.790600>
- Cunningham, C., Parks, J., Heinemeyer, C., Bailey, J., & Castanada Martin, A. (2023). g domains for developing agency amidst disagentistic student discourses about our climate crisis. *The SoJo Journal: Educational Foundations and Social Justice Education*, 8(1), 35–56. <https://www.infoagepub.com/products/the-sojo-journal-vol-8-1>
- Earley, M. A. (2014). A synthesis of the literature on research methods education. *Teaching in Higher Education*, 19(3), 242–253. <https://doi.org/10.1080/13562517.2013.860105>
- Fine, M., & Torre, M. E. (2022). *Essentials of Critical Participatory Action Research - Essentials of Qualitative Methods Series*. American Psychology Association.
- Gibson, S., & Sullivan, C. (2012). Teaching qualitative research methods in psychology: An Introduction to the special issue. *Psychology Learning & Teaching*, 11(1), 1–5. <https://doi.org/10.2304/plat.2012.11.1.1>
- Golding, C. (2009). Integrating the disciplines: Successful interdisciplinary subjects. Centre for the Study of Higher Education. <http://www.cshe.unimelb.edu.au/>
- Harris, R., Pownall, M., Thompson, C., Newell, S. J., & Blundell-Birtill, P. (2021). Students’ understanding of psychological literacy in the UK undergraduate curriculum. *Psychology Teaching Review*, 27(1), 56–68. <https://doi.org/10.53841/bpsptr.2021.27.1.56>
- Heinemeyer, C., Parks, J., Pugh, V., Hurst, L., Williams, S., Odell, A., Adekola, O., Jagdev, M., Turner, H., Nattress, C., Byrom, A., Cunningham, C., Galloway, M., McCaleb, M., Reason, M., & Mason, L. (2022). *Living Lab: Learning at the Junction – Reflection Report*. Project Report. [https://www.yorks.j.ac.uk/research/institute-for-social-justice/events-reports-and-videos/reports/#:~:text=Living%20Lab%3A%20Learning%20at%20the%20Junction%20Report%20\(PDF%2C%204.9%20MB\)](https://www.yorks.j.ac.uk/research/institute-for-social-justice/events-reports-and-videos/reports/#:~:text=Living%20Lab%3A%20Learning%20at%20the%20Junction%20Report%20(PDF%2C%204.9%20MB))
- Hossain, M., Leminen, S., & Westerlund, M. (2019). A systematic review of living lab literature. *Journal of Cleaner Production*, 213, 976–988. <https://doi.org/10.1016/j.jclepro.2018.12.257>
- Hulme, J., & Cranney, J. (2021). Psychological literacy and learning for life. In J. Zumbach, D. Bernstein, & S. Narciss, & G. Marsico (Eds.), *International handbook of psychology learning and teaching* (pp. 1–29). Springer International Publishing.
- Kontopodis, M., & Jackowska, M. (2019). De-centring the psychology curriculum: Diversity, social justice, and psychological knowledge. *Theory & Psychology*, 29(4), 506–520. <https://doi.org/10.1177/0959354319858419>
- Kreber, C. (2013). *Authenticity in and through teaching in higher education: The transformative potential of the scholarship of teaching*. Routledge.
- Larsen, C., Walsh, C., Almond, N., & Myers, C. (2017). The “real value” of field trips in the early weeks of higher education: The student perspective. *Educational Studies*, 43(1), 110–121. <https://doi.org/10.1080/03055698.2016.1245604>

- Lefebvre, H. (1991). *The Production of Space* (Nicholson-Smith, D., Trans.) Basil Blackwell (Original work published in 1974).
- Maier, K. J., Whitehead, G. I., & Walter, M. I. (2018). Teaching psychology and climate change: One way to meet the call for action. *Teaching of Psychology*, 45(3), 226–234. <https://doi.org/10.1177/0098628318779261>
- McArthur, J. (2023). Rethinking authentic assessment: Work, well-being, and society. *Higher Education*, 85, 85–101. <https://doi.org/10.1007/s10734-022-00822-y>
- McGovern, T. V., Corey, L., Cranney, J., Dixon Jr., W. E., Holmes, J. D., Kuebli, J. E., Ritchey, K. A., Smith, R. A., & Walker, S. J. (2010). Psychologically literate citizens. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline* (pp. 9–27). American Psychological Association. <https://doi.org/10.1037/12063-001>
- Morris, S., Norris, K., & Cranney, J. (2021). Psychological literacy. *Oxford Bibliographies in Psychology*. <https://doi.org/10.1093/obo/9780199828340-0291>
- Murtonen, M. (2015). University students' understanding of the concepts empirical, theoretical, qualitative and quantitative research. *Teaching in Higher Education*, 20(7), 684–698. <https://doi.org/10.1080/13562517.2015.1072152>
- Office for National Statistics (2023). Statistical bulletin Cost of living and higher education students, England: 30 January to 13 February 2023. <https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/bulletins/costoflivingandhighereducationstudentsengland/30januaryto13february2023>
- Office for Students (2022). *Framework for programme reviews: Ensuring the value of university courses*. Universities UK. <https://www.universitiesuk.ac.uk/sites/default/files/field/downloads/2022-01/uuk-framework-for-programme-reviews.pdf>
- Palmer, S. L., Hemmings, N., & Crellin, N. (2021). *The right track: Participation and progression in psychology career paths*. Nuffield Trust and British Psychological Society. https://www.nuffieldtrust.org.uk/sites/default/files/2021-07/1625671007_nuffield-trust-the-right-track-pipeline-of-psychologists-web2.pdf
- Peyton, M. (2023). *The Community Garden: Helping to Build a Greener Campus*. Institute for Social Justice. <https://blog.yorksj.ac.uk/isj/2023/05/10/the-community-garden-helping-to-build-a-greener-campus/>
- Ramezanzadeh, A., Zareian, G., Adel, S. M. R., & Ramezanzadeh, R. (2017). Authenticity in teaching: A constant process of becoming. *Higher Education*, 73, 299–315. <https://doi.org/10.1007/s10734-016-0020-1>
- Rosales, C. E., & Majzler, R. D. (2023). We need more praxis: A case for praxis assignments in psychology courses. *Teaching of Psychology*, 50(2), 131–136. <https://doi.org/10.1177/00986283211064339>
- Russell Group Students' Unions (2023). *Student Cost of Living Report*. <https://static1.squarespace.com/static/63f4ed73056f42572785c28e/t/640b4a3d20fc6122160c275e/1678461513650/Cost+of+Living+Report+-+March+2023.pdf>
- Sanderson, V., Harkry, L., & Pfeiferet, G. (2022, September 2). Why graduate outcome measures in psychology don't add up. *The psychologists*. <https://www.bps.org.uk/psychologist/why-graduate-outcome-measures-psychology-dont-add>
- Schipper, E. L. F., Dubash, N. K., & Mulugetta, Y. (2021). Climate change research and the search for solutions: Rethinking interdisciplinarity. *Climatic Change*, 168(18), 1–11. <https://doi.org/10.1007/s10584-021-03237-3>
- Schreier, M. (2012). *Qualitative content analysis in practice*. Sage.
- Sutton, J. (2008). *Careers: What do psychologists do?* <https://www.bps.org.uk/psychologist/careers-what-do-psychologists-do>
- Van Lange, P. A. M., Joireman, J., & Milinski, M. (2018). Climate change: What psychology can offer in terms of insights and solutions. *Current Directions in Psychological Science*, 27(4), 269–284. <https://doi.org/10.1177/0963721417753945>
- Wagge, J. R., Hurst, M. A., Brandt, M. J., Lazarevic, L. B., Legate, N., & Grahe, J. E. (2023). Teaching research in principle and in practice: What do psychology instructors think of research projects in their courses? *Psychology Learning & Teaching*, 22(1), 4–19. <https://doi.org/10.1177/14757257221101942>
- Wiggins, S., & Burns, V. (2009). Research methods in practice: The development of problem-based learning materials for teaching qualitative research methods to undergraduate students. *Psychology Learning & Teaching*, 8(1), 29–33. <https://doi.org/10.2304/plat.2009.8.1.29>

- Woolcock, N., & Ellis, R. (2021, May 19). Graduates face tougher job hunt after psychology and business degrees. *The Times*. <https://www.thetimes.co.uk/article/graduates-face-tougher-job-hunt-after-psychology-and-business-degrees-data-suggests-cpbr0bpmb>
- YSJ (2023a). *Strategy 2026 Refresh*. <https://www.yorks.ac.uk/about/2026-strategy/>
- YSJ (2023b). *Data monitoring*. <https://www.yorks.ac.uk/policies-and-documents/diversity-monitoring/>
- YSJ (2019). *Access and participation plan: 2020-21 to 2024-25*. https://www.yorks.ac.uk/media/development-assets/common-footer/access_and_participation_plan_2020-21_to_2024-25.pdf
- YSJ (2022). *Win for York St John University's Living Lab air quality project at 2022 Green Gown Awards*. <https://www.yorks.ac.uk/news/2022/green-gown-awards-2022/>

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