



Council of the Heads
of Built Environment



CHOBE Special Interest Group Series
2022/2023

**“Research Centres/Networks-Education Link
in the Built Environment”**

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About CHOBE and the Special Interest Group (SIG) Project

CHOBE supports and represents, with a voice of influence, those with strategic responsibility of the development and delivery of graduate and postgraduate education and research within the disciplines of construction property and surveying.

CHOBE's objectives include

- Developing communities of practice in built environment education to support heads of department/schools (or nominees) in the UK and Ireland
- Influencing policy consultations through being the collective contact point for issues about built environment education for external stakeholders and Professional Statutory and Regulatory Bodies
- Providing a forum in which people can come together to network, share and address problems in a supportive and collaborative way
- Addressing the practical, day-to-day matters associated with learning, teaching, and assessment
- Funding to initiate larger research projects that can have an impact on how we deliver our businesses

In June 2022 CHOBE invited proposals to establish Special Interest Groups (SIGs) for the forthcoming academic year. The purpose was to carry out small, targeted research into specific themes facing Built Environment educators. Each group was led by an expert in that particular field who will work in association with a number of interested academics to discuss and identify different forms of innovation and good practice. Six SIGs were supported with a grant of £2000 each.

Acknowledgment

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CONTENTS

Executive Summary	4
Introduction & Background	4
Research Design	5
Key Findings & Discussion	5
Recommendations	9
Conclusions	11
References	11
About the Author	12
Appendix	12

Executive Summary

To provide opportunities to develop a collaboration that strengthens multi-disciplinary research and addresses major global challenges facing society, there are various research groups, centres, and networks in universities in the UK that work independently or jointly to conduct innovative research and facilitate multidisciplinary activities.

Although these research centres/networks conduct various research relevant to the built environment, there is not much contribution to teaching and education, and the contribution of the research activities to the pedagogy is largely missing. This institutional gap necessitates linking research centres/networks to education in the built environment. This linkage provides educators and students with the opportunity to be informed about up-to-date research outcomes, innovative research methods, and advanced technologies. This will also increase collaboration between students, researchers, and educators and help students to share their ideas with researchers and engage in research activities. The main goal of the proposed SIG is to raise awareness about the importance of creating a Research Centres/Networks-Education link in the built environment. In this research, the advantages and berries of creating this link are investigated and practical recommendations and suggestions are developed.

Introduction & Background

The main objective of universities is to create and transfer knowledge (Berbegal-Mirabent, Sánchez García & Ribeiro-Soriano, 2015). To achieve this goal, universities have created internal structures dedicated to research, i.e. research institutes, centres, and networks, to create communication channels to transfer research outcomes (Morales Rubiano, Sanabria Rangell, Plata Pacheco & Hernández, 2015).

In addition to responding to the need of changing the universities' structures, university research centres were established so that researchers from different origins can come together to solve complex problems of different types (Berbegal-Mirabent et al., 2015, Bozeman & Boardman, 2003).

A research centre/network is defined as a formal organizational entity within a university, which exists primarily to carry out a research mission, and includes researchers from more than one department (Bozeman & Boardman, 2003). So they are the main units of creating new knowledge (Sabharwal & Hu, 2013). In small and medium research centres, research is done by researchers and students under the guidance of a professor who also teaches (Jain & Triandis, 1997). In large research centres, networks, and institutions, there is a cooperation between them in different universities and countries, which enables a greater exchange of knowledge and resources.

There are also various research centres and networks in UK universities to conduct innovative research, facilitate and strengthen multidisciplinary activities and address major global challenges facing society.

Although research centres/networks conduct various research relevant to the built environment, their contribution to the pedagogy is largely missing (Hajdarasic et al., 2015). Since student achievement and success play a vital role in educational institutions, as it is often used as a measure of institutional performance (Alyahyan & Düştegör, 2020), this institutional gap necessitates linking research centres/networks to education in the built environment.

This linkage provides educators and students with the opportunity to be informed about up-to-date research outcomes, innovative research methods, and advanced technologies. This will also increase collaboration between educators, students, and researchers; strengthen research-teaching relationships; help students to share their ideas with researchers and engage in research activities as well as develop their transferable skills (Robertson, 2007).

Aim & Objectives:

The main goal of the proposed SIG is to raise awareness about the importance of creating Research Centres/Networks-Education link in the built environment. The main objectives are:

- 1- Investigating barriers and advantages of linking research networks to teaching and educational activities.
- 2- Gaining first-hand insight into the research centre/network-education gap.
- 3- Developing practical recommendations to fill the network-education gap.

Research Design

A qualitative approach was adopted in this project, and based on a case study approach, three universities -Oxford Brookes University, University of West of England, and Sheffield Hallam University- among 36 universities as members of the CHOBEN have been selected. Data were obtained from semi-structured interviews and workshops discussion.

Leads, Co-Leads, and Chairs of the research centres/networks and potential built environment educators were the participants of this research. It aimed to conduct seven interviews and organize one focus group workshop in each institution. However, in the end, a total of 18 interviews were conducted: seven interviews at Oxford Brookes University, six interviews at the University of the West of England, and five interviews at Sheffield Hallam University.

In the interview, the participants were asked to discuss to what extent and how the research centres/networks are connected to different disciplines in the built environment and to what extent students are linked to, or involved in, research centres/networks. Participants also shared their opinion about creating a Research Centres/Networks-Education link in the built environment, its advantages and barriers; and the role of the Leads, Co-Leads, and Chairs of the research centres/networks in creating this link. Their suggestions for creating this link were also discussed.

Three focus group workshops were also conducted in each university and the barriers to, and opportunities for, linking research networks to education were discussed.

Key Findings & Discussion

Data collected from this research were analysed through content analysis and the results are presented below.

1. Connection between research centres/networks and different disciplines in the built environment

In terms of the connection between different disciplines in the built environment and research centres/networks, participants who were the Leads, Co-Leads, and Chairs of the research centres/networks mentioned that these centres are set up to be interdisciplinary and

multidisciplinary to encourage cross-faculty collaboration. So according to them, there's a very close and obvious link between their research centre/network and the built environment in many aspects. It means that their centres cover everything from architecture, urban design, and planning, even down to interior design. However, a few of the educators in the built environment have different ideas. They mentioned that there is this intention and a lot of ambition in this regard, but in practice, they cannot see enough integration or implication in terms of pedagogy. According to them, a specific type of collaboration needs to be established which requires time or forms, and also finding the right people.

One of the educators stated that: "this discipline continues to be isolated, and they don't see this interdisciplinary collaboration, and students remain confined in their silos". They didn't mean that there is no connection but in their knowledge, this connection does not exist.

2. Students' connection and involvement to research networks/centres

In terms of students' connection and involvement with research centres/networks, the views were varies among participants.

Participants from the research network believed that students were not a priority initially, and the priority was for staff to build a strong network. However, PhD students are somewhat involved in their networks by being able to join the network and receive emails and updates. On some occasion, a few PhD students are also a member of the steering group or the networks starts adding them. But in general, they're just not joining quite as much as they could be. In terms of master and undergraduate students, unfortunately, they are not directly members of the network. They can sign up to receive bulletins and information about events etc. They can also involve in the events or helping to organize the events. But not closely involved like being part of the core, e.g. the steering group.

However, this is somehow different from the viewpoint of participants from research centres. According to them, in research centres, PhD students are part of the group but not as full members. They sit with the members, they join all the meetings and as far as possible, they're treated as staff. The research centres are trying to get them involved with teaching, master's dissertation supervision, and that kind of thing to help their career development and give them skills, improve their CV, etc. Master's students are not involved as much as PhD students but more than undergraduates. They are particularly involved through dissertation supervision, or doing pieces of work (e.g. writing case studies).

But the lectures in Built Environment had another point of view. Some said PhD students are directly linked because they would do research under the supervision of one of the members. In that case, whatever networks the supervisor gets involved with, the PhD students also involve.

Some lectures also said that PhD students have their research centre. They do a lot of seminars and they talk about their research. So they do not get too involved in the other centres due to the reason that other centres are much more involved with bidding and doing scholarship-type research, and PhD students are much more focused on their PhD.

According to the lecturers, Mater and undergraduate students are somehow involved as their dissertation supervisors are members of those centres.

In a worst-case scenario, according to some of the lectures, the students are not even aware that these research centres exist.

Some of the reasons that undergraduate students are not involved in research centres/networks are:

- Capacity and resources:
There's a limit to how much the research centres/networks can do. For example, the seminars they organize are an opportunity to discuss the research in more detail. Involving students requires organizing mass events.
- Strategic decision of the networks:
One of the aims of the networks is to win external funding which is likely to happen with PhD and master's students rather than undergraduates.
- Lack of activities that are aimed at undergraduates.
- Not every topic would be interesting for everyone.

3. Advantages of linking research networks to teaching and educational activities for both students and researchers/lecturers:

All of the participants agreed that the link between research centres/networks and education in the built environment is really important, critical, and essential. They believed that it would be good for students to see that there is life beyond the modules. One of the participants mentioned: "what we cannot forget is that all teaching and learning should be research-based".

In addition to being really up to date and getting exposure to more serious and real live research for students the following advantages have been mentioned by the participants:

- It is about knowledge exchange between both researchers and students.
- It improves interdisciplinary and multidisciplinary collaboration between students and researchers,
- It helps students to be connected with the community and industry which leads to more engaging topics and new ideas
- It is a great training process for students to learn a lot about different kinds of research and how to present research and how to work with others.
- It helps to build skills, such as cognitive skill, analytical skills and critical thinking,
- It develops their CV and employability by having external experience in their course.
- It helps students communicate with people from different backgrounds and experiences, and enhance networking.
- It gives them a more forward-looking perspective in terms of the subject matter, employment pathways, and the people they will ultimately end up being.
- It creates an inclusive and diverse environment
- It is also a means of disseminating research for researchers.

4. Suggestions to create the link between research centres/networks with education

In the interview, the participants made some suggestions to create the link between research centres/networks with education in built environments which are as follows:

- Having student representatives (PhD and master students) on the steering group.
- Collaboration with local companies and involve students in paid activities.
- Developing interdisciplinary teaching materials to support an interdisciplinary learning environment.
- Enhancing opportunities for teaching across the university (cross-faculty). E.g., students from anthropology could take classes in the School of the Built Environment.

- Organizing seminar series, that undergraduates can take for credit as an independent study module.
- Building a couple of sessions just for students.
- Promoting events to make the centre more known and show that it is not a closed group.
- Having events that showcase undergraduate work, something with a nice prize for an undergraduate (e.g. network excellence prize).
- Encourage students to think about ways of publishing their research and let them know about these opportunities. It does not need to be a peer-reviewed professional journal.
- Organizing conferences, seminars, workshops, or even short talks, are good opportunities for students to share their work and networking, etc.
- Every staff should be a member of research centres/networks.

5. The role of Leads, Co-Leads, and Chairs of the research networks in creating research-education link:

The participants of this study also discussed the role of Leads, Co-Leads, and Chairs of the research centres/networks in creating research-education link in the built environment. According to them, the Leads, Co-Leads, and Chairs of the research centres/networks should:

- insist or encourage each other to have student aspects in their strategy,
- share good practices between the different networks,
- continue to be the promoter of special events,
- resolve managerial tools,
- build relationships with the people who mostly focus on teaching,
- try and facilitate co-design and co-creation between staff and students,
- bring in new ideas about how to make the research centres/networks very vibrant through collaboration,
- be responsible for creating several opportunities or activities that are tailored to students.

Besides all of the advantages and suggestions for creating the link between research centres/networks and education, some issues and barriers in creating this link were also raised by the participants in this study which is discussed in the next section.

6. Barriers to linking research centres/networks to teaching and educational activities

The main and important barriers mentioned by most of the participants are “*time and workload*” as well as “*budget and resources*”. “*Institutional barriers*” are another one that is related to recruitment strategy and institutional structure. At a strategic and institutional level, according to the participants, newer universities -the Universities from 1992- are fundamentally teaching institutions and not yet research institutions, and their recruitment strategy focuses on people who spend most of their time in the classroom while they might be people who are very capable of research. In this regard, one participant mentioned: “some staff are teaching staff and do very little research, and some staff are research staff and do very little teaching. As a consequence, the contractual setup can often make it quite difficult to bring those two worlds together and can make it quite difficult to get research into teaching”.

“*Lack of people's willingness and flexibility*” are other barriers. Sometimes ability and capacity are really low for both students and staff.

Lack of enough publicity is also a barrier to knowing who is interested and where this could fit in. Also, some of the processes are quite bureaucratic which a barrier is.

Being “*exclusionary*” is also another one. The centres usually prefer different social actors, practitioners, students, and everyone who is not an expert, to come and join, but they continue to have their discussions at an expert professional level, which could be exclusive

Recommendations

The above barriers were discussed in the workshops and the participants recommended some solutions for the main barriers listed above.

Regarding the time and workload barrier, some solutions are as follows:

- Reducing the amount of bureaucratic work which takes a lot of time to handle that is not needed.
- Improving administrative support.
- Involving PhD students in some activities like dissertation supervision: according to some of the participants, there are many brilliant PhD students, particularly in the second and third year who are exceptional researchers and make much better supervisors than many of the experienced staff. However, there are still some challenges in this regard. For example, some participants argued that some staff is very sceptical about the value that PhD students. Moreover, there is a perception or cultural expectation that students have in terms of who is going to be looking after them. They perceive they're getting a prof as a dissertation supervisor and now they're only getting a PhD student. This needs to be managed. However, there are also lots of pathways for PhD students to get involved such as helping in organizing events, doing lab work for undergrads, etc. This helps PhD students to have tutoring opportunities and experience as well as some financial support.
- Availability of some slack in the system.
- Efforts must be valued and awarded by university faculties. This reward can be time.
- Prioritizing capacity both personally and at an institutional level.

In terms of budget and recourses, some of the participants believed that the budget exists but it perhaps comes down to how they are prioritized for activities. For example, some ad hoc activities don't need a huge amount of budget (e.g. morning or lunchtime seminars) or a lot of really impactful activities which do not cost as much as people think. According to them, whenever some managers get in a pressured environment on a budget, unfortunately, they stop these activities. This happens when the focus should be on smaller impactful things that can make a difference because they are low risk and not going to blow the budget. This way may have the opposite impact. So understanding of budget would be helpful. But according to some of the participants, the budgets are not very transparent and staff don't have any idea of the departmental budget. As a consequence, it's hard to suggest creative approaches. Having a “special budget staff meeting” suggested by a participant as a solution for that. Other suggestions to tackle the budget and resources barriers are:

- Having a structure for allocating assistants (e.g. involving PhD students by waving some of the fees) to help with the teaching, and also involved in some of the research activities, was another suggestion to tackle the budget and resources barriers.
- Allocation of formal hours to staff who work in research centres/networks,

- Allocating a bit of extra funding for pilot projects to not only involve staff of the centre but also prioritize PhD students or Postdocs.
- Having people in all of the different departments do purely the marketing, and admin stuff, would then free up the time for people to focus on the research, putting in the grants, and getting the resources.

In terms of institutional barriers and recruitment strategy which caused separation between research and teaching, some participants mentioned that universities have to employ people who don't have PhDs, because not all students are going to be researchers but going into practice. So universities need teachers who have the appropriate professional experience to teach students. But they should also have the potential to develop themselves into research (if they want). However, some participants believed that as universities are institutions where people may end up doing research, anybody coming into a university should be up for doing some research. It could be consultancy research or running design workshops with practitioners or anything that pushes the boundaries of knowledge in some way and keeps them on top of their discipline and knowing what's going on in their discipline. Again, some participants were not sure that it's necessarily right to cause everybody to be research active like staff who come from a professional background, or those who probably deliver good teaching, especially in the built environment but they have got no interest whatsoever in doing research. As can be seen from the results, there is no general agreement on this matter and the opinions of the participants were different. Although one participant believed: "investing in the people that universities have and nurturing them is important rather than, letting them leave or having a person's replaceable kind of mind-set".

In terms of exclusionary as another barrier, some believe that this is something that relates to the aims and objectives of the networks and has got the potential to work well to create a more inclusive environment. According to the results of the workshop discussion, having a Public Advisory Group that has a combination of people with different lived experiences and representatives from different organizations, would be helpful. Also involving other people (public or practitioners) in the development of research proposals not only help in generating research ideas but also when more people involve, more people are aware of the research. This increases the opportunities for research centres/networks to take research or its outputs on board. Organizing public lectures at the very public oriented was also recommended to increase inclusivity. But it needs to be sure that the program has got the mix and people know what to expect and what it's likely to contain. Otherwise, the danger is that it ends up restricting people from being involved in things that they might be appropriately capable of engaging and interested in. A joint event between research centres/networks is also another way that usefully contributes to creating links and inclusionary.

Regarding the lack of people's willingness as a barrier to creating the link between research centres/networks and education raised in the interview results, some of the participants in the workshop believed that the engagement level is high among those who are always keen and interest, and less engagement is not only because people are not interested but lack of time sometimes causes less engagement too. So flexibility in the timetable would be helpful. Some of the participants also mentioned that the lack of willingness is more on to the student culture rather than the staff culture. So looking for something to motivate students would be an advantage. For example, creating a platform for students to generate their events and involve staff, enables students to come together and think about a particular theme in whatever they

want to do and then they organize activities. It encourages them to do some more interesting things beyond what they do in class. Also offering some placements to students would be another way of encouragement and engagement. These placements can also become a part of their credit. Some also pointed to a performance management process to enforce this stuff. So everyone will realize that it is serious.

Some participants argued that leadership is also quite important. The heads of departments are quite powerful to take many shapes and forms. It requires the heads of departments to show some willingness to accept some risk and ask staff to come up with new innovative ideas and to try things out and experiment a little bit. But it would be more difficult with conservative leadership.

Conclusions

The results of this study demonstrate that the link between research centres/networks and education in the built environment is critical. It provides educators and students with the opportunity to be informed about up-to-date research outcomes, innovative research methods, and advanced technologies. Creating this link not only helps students in terms of motivation, but also helps them to engage in some of the most pressing issues, and involve in real-life situations, and get involved in that wider world. So the participants of this study believed that this connection should not be lost. However, some evidence in this research shows that research centres/networks and education are not clearly linked, and students, in general, are not joining the research centres/networks as much as they could be and sometimes the students (mostly masters and undergraduates) are not even aware that these research centres exist. This shows more work needs to be done. Therefore suggestions and recommendations discussed by participants of this study would be helpful to solve the barriers and make a pathway to create a research centre/network-education link which ultimately, raises the quality of the university's education from a pedagogical point of view, and research-informed teaching which they strive for.

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About the Author

Dr. Maryam Mani is a research fellow at the School of Built Environment at Oxford Brookes University. Her research mainly focuses on environmental psychology, restorative environment, and human-environment interaction. She is currently working on the impact of the natural environment on the health and well-being of different groups of people in terms of age, gender, and ethnicity. Her background is in Irrigation Engineering with a Master's and PhD in Landscape Architecture. She has acquired a diverse set of research and methodological experience and has expertise in interdisciplinary mixed methods. She is currently researching the role of urban community gardens in creating ethnically inclusive environments (funded by BA/Leverhulme).

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Appendix

Interview Questions:

1. Can you tell me about yourself and your position?
2. To what extent and how are the university research networks connected to different disciplines in the built environment (such as architecture, urban design, planning, construction, real estate, etc.)?
3. To what extent undergraduate, postgraduate, and Ph.D. students are linked to, or involved in, your network?
4. What do you think about creating a Research Networks-Education link in the built environment?
5. In your point of view, what are the advantages of linking research networks to teaching and educational activities (such as seminars, workshops, and excursions)?
6. What are the barriers to linking research networks to teaching and educational activities?
7. What suggestions do you have for creating a more active role for the networks in facilitating teaching about the built environment?
8. From your point of view, what is the role of the Leads, Co-Leads, and Chairs of the research networks in creating this link?
9. Can you suggest some activities, resources, or programs for creating this link?
10. Do you have any other suggestions or comments that you would like to share with me?