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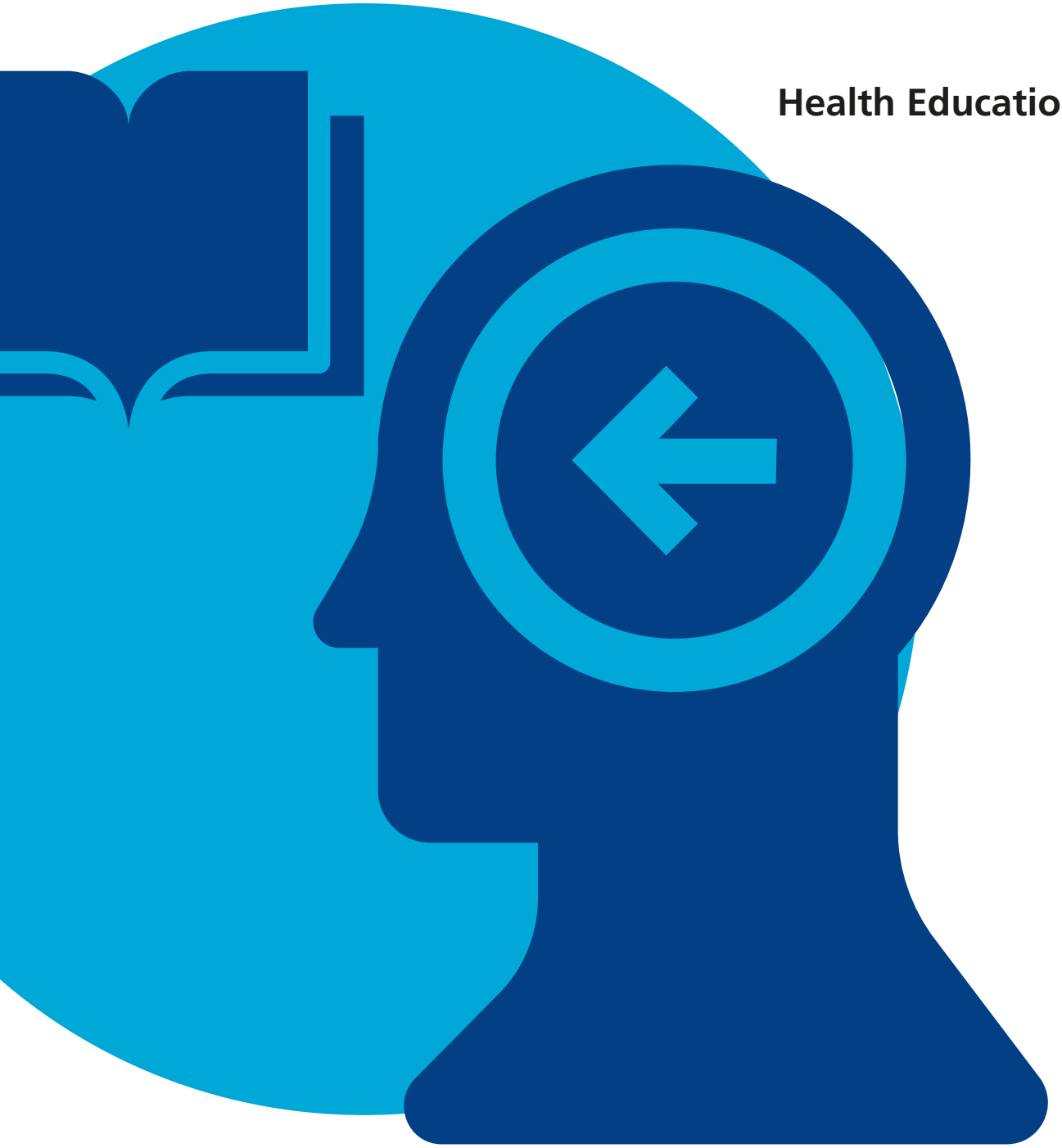

Guide to Practice-Based Learning for Allied Health Professional (AHP) Students in Research

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Definitions

Research

Research is defined as a systematic investigation to 'derive generalisable or transferable new knowledge to answer or refine relevant questions with sound methods' (HRA, 2017 p6). Research underpins practice, and evidence-based medicine is the bedrock of clinical practice. Allied Health Professions (AHPs) are integral to leading, implementing and engaging with research across health and social care to improve the lives of the individuals they work with.

The importance of this is reflected by the AHP strategy of the National Institute of Health Research (NIHR). This emphasises the core role of AHPs in delivering its mission 'to provide a health research system in which the NHS (National Health Service) supports outstanding individuals working in world class facilities conducting leading edge research which is focused on the needs of service users and the public.' (NIHR CRN Allied Health Professionals Strategy 2018-2020)

Supporting students to develop skills in a range of quantitative and qualitative research methodologies by offering them opportunities to be immersed in research is key to building a workforce confident to continue to build and apply this evidence base and create AHP research leaders of the future.

Practice-Based Learning

Practice-based learning takes place during placements which involve a range of learning opportunities to support the student's development. A placement is where students apply and consolidate their learning, bringing together academic theory and workplace practice to develop skills and competences needed to register as health and care professionals (HEE 2020). Practice-based learning is supervised and structured to enable progress towards learning outcomes and usually involves assessment of the learner.

Introduction

This guide shows the possibilities and benefits of offering practice-based learning in research for Allied Health Professional (AHP) students. The ideas and examples show how practice-based learning in research can enable students to achieve their learning outcomes and enhance their professional skills and employability. We hope that it will inspire those working in research roles to offer these innovative types of practice-based learning to AHP students.

The guide will be updated as we hear of new examples in research practice-based learning.

The guide is for those working in research roles across different sectors, including but not limited to:

- voluntary organisations
- social care
- NHS service providers
- private companies
- arm's length bodies
- higher education institutes

This guide will benefit:

- Researchers who may not be aware of the benefits of hosting AHP students on practice-based learning
- Researchers who are considering offering innovative practice-based learning for AHP students and would like some guidance on where to start
- Students going on an education practice placement who want to know what to expect.
- Researchers who already offer education practice-based learning opportunities to students and are looking for ideas to improve the experience.
- Clinicians who would like to develop or incorporate service evaluation, audit or small-scale research projects to create a placement

Background

Practice-based learning is recognised in the NHS Long Term Plan as a vital investment in the future NHS and social care workforce. The plan drives a vision of 21st century care which requires an all-rounded, skilled, and flexible AHP workforce. By providing aspiration for a varied career ahead we can improve retention. Research is a fundamental part of service delivery and improvement in every sector and service. The drive to offer more practice-based learning in research and innovative solutions help us to deliver safe and effective healthcare. This will mean innovative ways of working, new roles and opportunities. It is helpful to consider practice-based learning in relation to the 4 pillars of advanced practice. Supporting students with practice-based learning enriches the experience of everyone in the team by bringing new perspectives and energy, improving service delivery, and sharing innovative approaches.

Practice-based learning is changing to meet these requirements and AHP students are encouraged to experience practice-based learning that extends beyond clinical work to also encompass these wider areas of AHP practice. It is helpful for AHP students to be exposed at an early stage to opportunities across each of the pillars. Additionally, students may want to build up more experience in one pillar to support their future career aspiration.

In 2017 Health Education England, in partnership with NHS England and NHS Improvement, developed a multi-professional framework for advanced clinical practice in England, which includes a national definition and standards to underpin the multi-professional advanced level of practice. This framework details the requirements for AHP's working as Advanced Practitioners.

Within this framework the four pillars that underpin this practice are:

1. Leadership and Management
2. Education
3. Research
4. Clinical Practice

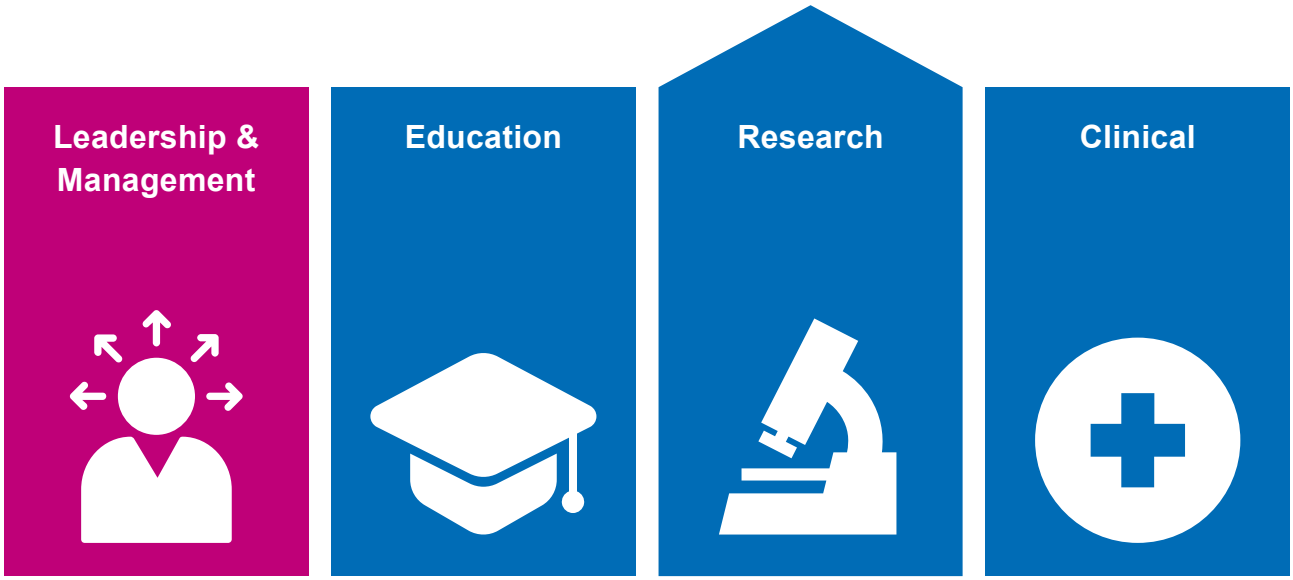


Fig. 1 Four pillars of practice

Picture Credit: Dan Dimmock / Unsplash

The Importance Of Research Practice-Based Learning

High-quality research is central to evidence-based practice and is essential for the NHS to deliver on the ambitions set out in the NHS Long-Term Plan (2019). Clinical practice is ever-changing and must respond to the needs of the population, incorporating rapid developments in science, technology, and methodologies, new care models and, as the COVID-19 pandemic has demonstrated, emerging health challenges. Healthcare organisations that engage in high quality, person-centred research have been associated with a range of improved outcomes including: higher rates of service users' satisfaction, reduced mortality, improved CQC performance and organisational efficiency (CAHPR 2019, NIHR 2018). As AHPs work across a range of roles and health and social care settings, unleashing the potential of the AHP workforce at all levels is of national strategic importance (NIHR, 2018). We all have our part to play in shaping the future of health and care and by supporting students to gain the necessary applied research knowledge and skills during their training, we can ensure the future AHP workforce are primed to become clinicians who are able to drive change, embed research within practice and, for some, become research leaders of the future.

Practice-based learning in research is not separate to, or distinct from, any other type of practice learning. Research practice-based learning should be treated in the same way as any other; students must abide by their standards of professional conduct and follow the local information governance and safety protocols of the organisation. Any breeches will be managed by the university or education provider in line with their fitness to practice policies

> *"What enabled us to be able to offer practice-based learning opportunities was having research-active members of the staff in the Occupational Therapy team. I can only see advantages in research placements. We need to offer opportunities for Undergraduate students to make research part of their clinical work and daily practice - not a 'separate career'. Students need to be exposed to the research world as early as possible. It is how I started my research career."*
>
> **Professor Enedia Moishi Professor of Dementia Care Research & Deputy Director, NIHR Applied Research Collaboration, East of England.**

"Throughout my degree, the importance of evidence-based practice was emphasised, but I had never considered the possibility of contributing to the evidence base until I attended a study day. I arranged a week-long elective placement in the radiology research team at Mid-Yorkshire NHS Trust and hoped this would give me an informal introduction to research. I was also keen to see how research radiographers combined the research elements of their role with clinical work, and how they were able to prioritise research activities in a busy clinical department. I was astonished to learn the different responsibilities of a research radiographer including coordinating clinical trials, working independently on their own research, collaborating on other research projects, acting as a peer reviewer, supporting clinical audits and monitoring implementation of research and audit recommendations. For the evidence based to be increased throughout the radiography profession, radiographers must get involved in research earlier in their career."

Esther MacInnes Studied BSc Radiography at University of Leeds and is now a Diagnostic Radiographer at Leeds Teaching Hospital NHS Trust. Esther chose to undertake a week-long elective placement during her undergraduate degree after attending a research study day and is now actively involved in increasing the awareness and importance of radiographers working in research.

"As a student, research can feel intimidating. We are only beginning to understand the profession, so how could we possibly influence it? However, students are in a unique position to engage with research, without the bias of having engaged with interventions for years. We can look critically at the evidence base and decide what interests us. Having a practice-based learning opportunity that encourages this kind of thinking so early is invaluable to crafting therapists with a critical mind and empowering them to think for themselves."

Hope Kightley - Speech and Language Therapy Student at Leeds Beckett University. Hope was allocated a research placement with the research team at the Royal College of Speech and Language Therapists in her final year of studying.

"Offering research practice- based learning opportunities can not only expose students to careers in research specifically but offers a brilliant opportunity to develop those skills in evidence-based practice that would be invaluable in a clinical, or research, career. Having the space and place to learn and appreciate the importance of critical appraisal or basic data analysis, for example, are important skills to take forward to practice, and may even facilitate a more research-active workforce going forward."

Katie Chadd - research manager at the Royal College of Speech and Language Therapists.

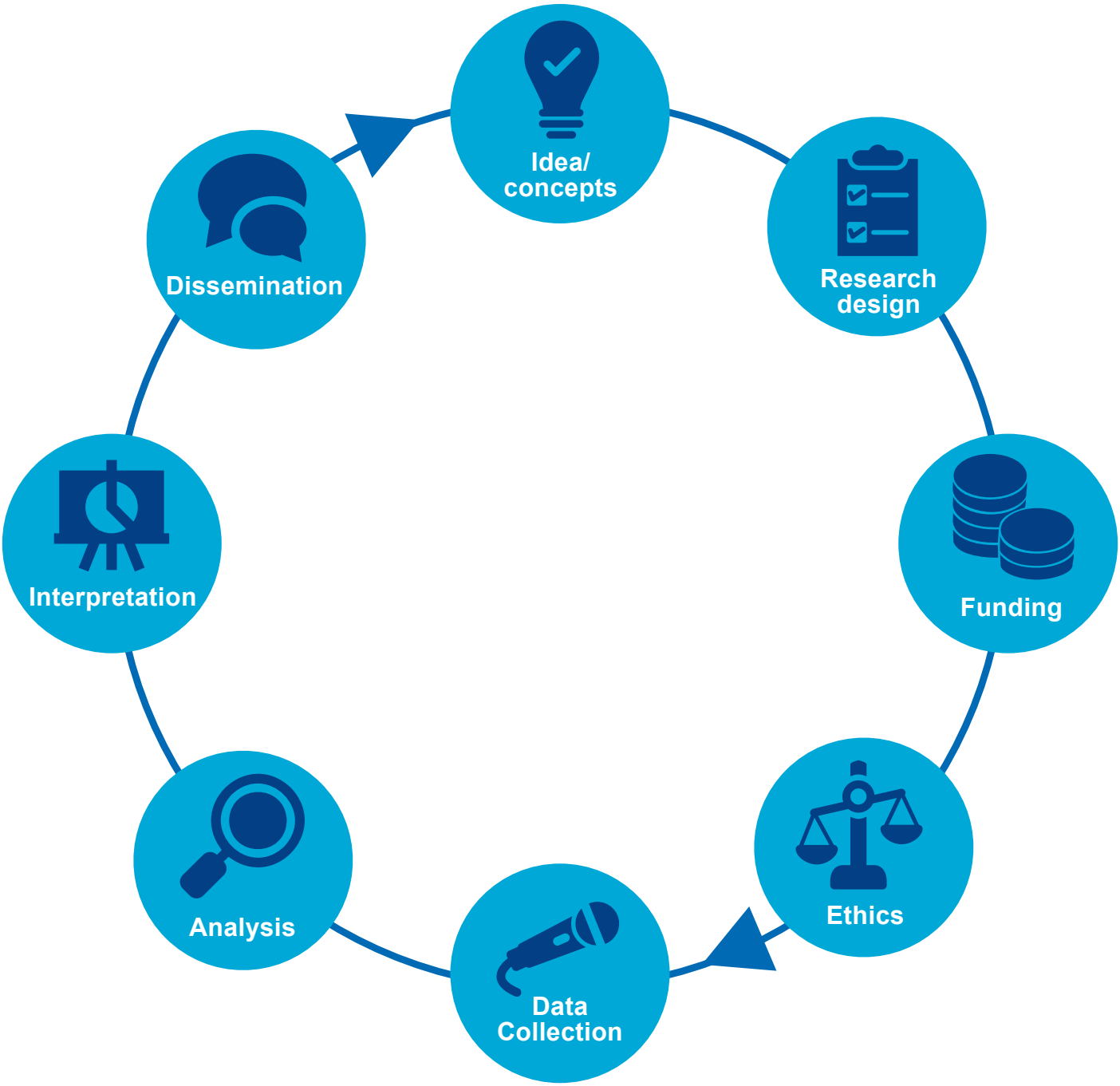
What Are The Benefits of Research Practice-Based Learning, And For Whom?

For the service user	For the student	For the researcher	For the service	For the organisation
Service User involved in research may benefit from:	Students who are involved in research benefit from:	Researchers who support research practice-based learning may benefit from:	A strong research culture is associated with:	Research active organisations demonstrate:
• Improved outcomes Increased opportunity to learn about health • Greater satisfaction	• Increased awareness and understanding of research methodologies and processes • Development of hands-on research skills • Opportunities to apply research knowledge to practice • Development of a range of 'soft' skills such as communication, collaboration, networking and presenting • An enhanced appreciation of emerging research careers for AHPs • Development critical appraisal skills	• Opportunities to develop research capacity within an AHP group • Greater opportunity to develop teaching and coaching skills • The involvement of student as a 'new pair of eyes may generate new insight • Evidence that may support their own career development • Opportunity for self-reflection and self-development	• Reduced staff turnover • Enhanced assimilation of research into practice, and in turn, research that is informed by practice • Enhanced creativity and innovation • Support the delivery of departmental research, service evaluation and audit	• higher rates of patient satisfaction • Reduced mortality rates • Improved CQC performance • Greater efficiency • Promotes the development of a future AHP workforce that is able to deliver evidence informed practice in line with several key strategic/ policy documents

For the service user	For the student	For the researcher	For the service	For the organisation
Service User involved in research may benefit from:	Students who are involved in research benefit from:	Researchers who support research practice-based learning may benefit from:	A strong research culture is associated with:	Research active organisations demonstrate:
	• Opportunities for self-reflection and self-development • Greater understanding of the importance of stakeholder engagement and service user and public involvement in research • Development of leadership skills e.g. decision making, and delegation. • Different skills and abilities which may be attractive to future employers • Confidence to engage in research right from the “start of their career	• Development of leadership skills • Improved job satisfaction • A ‘fresh’ clinical perspective to help orient research to the clinical need		

Ways To Involve Students In Research Using the Research Cycle

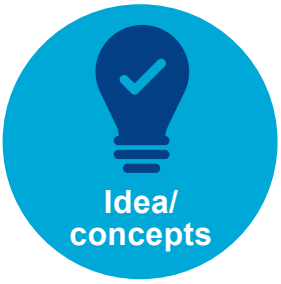
There are many ways that students can engage in research. The following diagram represents some elements of the research cycle. Individuals may contribute, participate in, plan, support or co-lead any number of elements from the conceptualisation of the research to the dissemination of findings. The Council for Allied Health Professions Research offers ideas for involving AHPs in research (CAHPR, 2019).



Deciding which elements of the cycle to involve students in will depend on a range of factors. This includes the length of the placement, the research project/projects available and the stage of the student's training which will also be linked to the learning outcomes they need to achieve. Students may participate in a number of discrete elements of different research projects or focus their energies on one study. In research projects where there is significant public and service user involvement throughout all stages students will have an opportunity to work closely with individuals, build rapport and see the research from multiple perspectives.

Below we offer some ideas for student involvement at each stage of the research cycle. This is not intended to be a prescriptive list and should be adapted to your local context and the research ongoing within your department or team. Some reflective questions are included at the end of the section to help you to consider where you may involve students.

Idea/concept Generation



Students' first-hand experiences, insights gained on other practice-based learning and levels of engagement in current literature mean that they are well placed to identify potential research topics. Where teams already have already identified broad areas for research students can help in developing these through undertaking reviews of the wider literature. The results of these reviews can underpin research grants and enable students to develop the key skills of identifying and synthesising evidence.

As a broader research community, we are increasingly aware of the value of involving end users in identifying topics for research. Engaging students in the planning of workshops and events with service user, and their families offers an excellent opportunity for research teams to build understanding of needs and priorities for research as well as offering students the opportunity to develop a range of skills including planning, facilitation, listening, synthesis and communicating with different audiences.

How can this meet student learning outcomes?

- Engaging with the literature = research, theory, evidence-based practice.
- Liaising with service users & families = communication skills, organisation, planning
- Planning workshops = developing assessments / interventions for the population involved in the research

Research Design

Inviting students to contribute and support in the development of research questions and the design of studies offers a number of opportunities. From the perspective of the research team, students can bring fresh ideas, undertake helpful research in relation to identifying examples of study design and offer perspectives in relation to the framing of questions. Students can find it helpful to see how studies are constructed and to build skills in the writing of aims and objectives.

How can this meet student learning outcomes?

- Research design is akin to an assessment skill. How do we find out what this population thinks / needs / does?
- Writing aims and objectives = written communication skills

Funding

Identifying and locating relevant funding is an integral part of the research process. Whilst research-active departments are frequently aware of the opportunities offered by significant funders, engaging students in this process can highlight lesser-known funding can be extremely valuable. Searching out such calls requires students to develop helpful research skills and for students who wish to pursue a future research career offers an excellent learning opportunity of potential funding they might access in the future.

How can this meet student learning outcomes?

- Identifying ways of meeting a specific need = intervention skills
- identifying and summarizing relevant information from a large volume of complex information and multiple sources.

> *"A practice-based learning student was able to add capacity to the influencing and dissemination side of our research project on research priorities. The student is involved in developing a campaign targeted at research funders to ask them to consider commissioning research on the priority areas. This has not only been invaluable to us but has meant the student has learnt much more about the research cycle and pipeline, and all the stages that are involved, from a really wide perspective."*
>
> **Katie Chadd – research manager at the Royal College of Speech and Language Therapists.**

Ethics

Preparation of statements regarding ethical principles and practices on prospective research grants and the completion of ethical protocols post-award are ways to enhance student understanding of research integrity. Feedback from students is that the process supports a deep form of reflection and shapes ways they think about fundamental principles relating to ethical practice and professionalism.

How can this meet student learning outcomes?

- Ethical practice and professionalism are often learning outcomes in their own right

Data Collection

There are many ways that students can be involved in data collection, from planning and organisation of paperwork through to face-to-face interactions with participants and all the other processes that sit in-between. This input can be invaluable for research teams but also enable students to build confidence in communication, develop skills in establishing rapport and in gathering and processing appropriate information. Students may need to get to grips with a range of policy and procedures as well as building skills in time management and organisation.

How can this meet student learning outcomes?

- Face to face interactions = communication skills, assessment skills, rapport building
- Organisation of data collection processes = prioritisation, time management
- Developing documentation = assessment skills

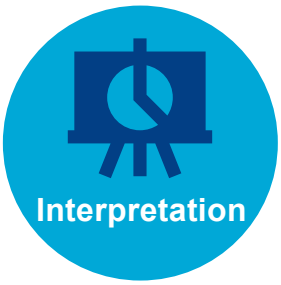
Analysis

How involved students can become in analysis of data will to a large degree be dependent on the type of data collected and its format. Learning about different approaches to analysis is an important learning opportunity and one which may take time to develop. However, where students can contribute to this process they can offer valuable input, particularly when checking for consistency of themes across a team as a form of triangulation.

How can this meet student learning outcomes?

- Analysis = assessment skills

Interpretation



Analysis of data is one element of research and finding ways to interpret this and to draw conclusions is another important aspect. Students may have been involved in multiple elements of the research and this may be a natural progression they make. Involving students at this point allows for a modelling of reasoning skills and helping students to connect various elements of the research.

How can this meet student learning outcomes?

- Interpreting data / assessment results = intervention planning skills

Dissemination

Sharing of research findings offers a breadth of opportunities for student engagement. From contributing to research papers and oral presentations through to the preparation of posters this process requires students to build confidence in presenting to different audiences, building confidence in verbal and written communication skills and in presenting information clearly and succinctly. Students can offer a wealth of insight in relation to a range of different social media platforms where research can be disseminated and shared and as a consequence can significantly extend the reach of the work.

How can this meet student learning outcomes?

- Content preparation = research & evidence based practice
- Content presentation = verbal & written communication skills

Public and Service User Involvement

There is a growing recognition by Professional and funding bodies of the importance of undertaking research with rather than simply on service users and end-recipients of services. This paradigm shift has opened up many opportunities and creative ways of involving individuals at all stages of the research cycle from the generation of research questions through to study design and dissemination. Students can play a key role, spending time to work along-side individuals, supporting developments in training of research skills such as interviewing and analysis and exploring creative ways to ensure that the voices of end users are heard in dissemination of research.

> *"In speech and language therapy especially, clinical skill is required in PPI (Patient and Public Involvement) activities because it's all about facilitating complex conversations about research with those who may have communication disorders. Having a student work on these activities has added expertise and increased capacity in this respect. For example, on placement, our student has consulted with adults with learning disabilities who are supporting the development of our research design. It's been a great opportunity to bring the clinical and research worlds together, and through the PPI activities the student has been able to develop both skill sets."*
>
> **Katie Chadd – research manager at Royal College of Speech and Language Therapists**

Reflective Questions

- ***Thinking about your own context, how might you involve students in the research you are undertaking?***
- ***Are there elements of the research cycle described above that you feel would work better in your particular setting?***
- ***Are there aspects of research not mentioned in the descriptions above where you feel students might benefit?***
- ***What might be some of the benefits to your team in opening up opportunities for students to join you on placement? How might your service benefit? How might the Profession benefit?***
- ***What other opportunities might there be in your environment for involving students in audit or service evaluation?***
- ***What might some of the practical considerations be of opening up these opportunities?***

Professor Claire Craig Co-Director of the Research Centre, Lab4Living, Sheffield Hallam University shares some examples on how they make it work in practice.

Lab4Living is an interdisciplinary research centre at Sheffield Hallam University which brings together researchers working across health-care and design.

We have offered placements to occupational therapy students for over ten years. Students can work in an interdisciplinary team comprising of researchers across the health-care, design, engineering, bioscience and fine art. End-user involvement is at the heart of much of our research and during a placement will work with individuals using services and with partners in industry.

During the placement students contribute to and work on 'live projects' with external stakeholders and in parallel also have the chance to undertake research to see their own ideas for potential design-led interventions translated into tangible prototypes which the students can take with them. The placement provides a solid foundation of how occupational therapists can inform the inclusive design of products and environments which reach a national and international market and in doing so impact positively on the lives of many individuals. Rather than simply prescribing and assistive products students learn how they can apply their expertise and knowledge to the design of these.

Much of our work in Lab4Living focuses on co-design and students ordinarily work alongside individuals in hospitals and the community and with broader health services to develop skills in listening, communication and in finding ways to identify needs and to create tangible solutions. Our role is to ensure that our students had a full and rounded experience to enable them to understand the key role that research plays in healthcare and to build confidence so that we support a future workforce of clinicians well placed to undertake research.

We approach this in 3 ways:

- Formal learning opportunities to build understanding of interdisciplinarity and research e.g., through attendance at weekly symposia and bespoke learning events. This is very much a collective team effort across the research team
- Guided input in relation to collective projects with directed support from the supervisor
- Independent project, led by the student with guidance from the supervisor

To place this into context. If we consider guided input in relation to collective projects with directed support from the supervisor - here is an example of how the students have been involved in the dissemination of evidence based materials to support people living with dementia and in evaluating these.

Feedback from our stakeholders on existing projects focusing on people with dementia, was that many services during COVID-19 had been re-directed to the acute sector and an identified need was for people living with dementia and their families to access materials that could support meaningful activity in the home environment.

Working in collaboration with AHP lead Elaine Hunter, Scotland and Alison McKeen, Alzheimer Scotland we undertook a piece of work to create an electronic platform to share evidence based occupational therapy interventions. We created the website Connecting People, Connecting Support to do just this and posted materials on the site twice a week. The occupational therapy students were directly involved in evaluating the materials we developed, in building understanding of the needs of carers and people with dementia and in the subsequent creation of materials for the site. Competencies developed by the students here were multiple. To take just a few examples, the students were able to use this participate in different forms of communication with the team and other agencies, show sensitive interaction with stakeholders (using web-based tools), to plan and implements occupation-based practice, adapting and modifying their intervention based on feedback.

The website is the basis of an Alzheimer Scotland Initiative named ‘Ask the OT’ and has received 35,000 unique page-views. Individuals from the Scottish Dementia Working Group have been active in supporting this development but also in the evaluation of the work. Through this learning opportunity the students were also given the opportunity to develop skills/competencies in understanding the needs of individuals accessing web-based media and to reflect on the potential role of the use of technology in supporting individuals living with dementia.

Alongside this work, the students are supported to pursue their own project and follow clear guidance to ensure that it relates to the scope of the practice setting and links to other areas and related services. One student developed an innovative intervention for carers and another student considered the role of design in operationalising an intervention focusing on anti-oppressive practice. The students had the opportunity to send ideas relating to reflective practice to expert colleagues in packaging design and their ideas were manifested in a 3-dimensional designed product.

Assessment of learning outcomes and competencies

We drew on feedback in several ways:

- Feedback was sought from the broader team in relation to the interactions colleagues had with the students. Here we were looking at interprofessional working, engagement with different forms of communication with the team and other agencies, instances of anti-oppressive practice, evidence of understanding the context of the placement and the role of occupational therapy within this.

- For the communal project: feedback was sought from external stakeholders (people with dementia, OT colleagues in Alzheimer Scotland, agencies involved in supporting people with dementia and people with dementia)

- The students formally presented their independent projects to a panel of external designers, design researchers and occupational therapists. Here they were required to describe the occupational therapy process, their professional reasoning, and key reflections in relation to their learning

- Finally, through close supervision of the students we were able to work using a reflective cycle to offer feedback and make assessment of key working practices (professional suitability, self-appraisal, self-development, initiation and motivation).

Feedback from students really speaks for itself:

> *I have absolutely loved my projects undertaken with Lab4Living. They have provided me with a variety of opportunities including presenting and working with Alzheimer's Scotland. I have reflected on my abilities and this placement has provided me with a new way of thinking about making a change and impact. I have the skills to undertake a scope of a service in the future to understand the role of OT and the value it can bring.*
>
> *The support in person and virtually was second to none! They gave me the chance to grow and develop and I cannot thank them enough.*
>
> **Marilyn Bradbury, HEE / NIHR Clinical Doctoral Research Fellow from Birmingham Community Healthcare NHS Foundation Trust, explains how her organisation have approached offering mixed research and clinical practice-based learning.**

We developed a mixed research and clinical placement model in order to meet the ongoing need to provide high quality pre-registration practice-based learning during the Covid-19 pandemic, whilst many therapy staff were redeployed into new and unfamiliar roles.

Practice-based learning needed to be delivered virtually where possible to reduce risk. We wanted to offer students the opportunity to gain clinical research experience via a virtual placement.

Our aims were to:

- Inspire students to be curious about clinical decision making, confident to explore and evaluate evidence relating to their clinical practice and to develop new research questions.
- Provide a virtual research training programme to cover core concepts such as governance, consent, ethics, public and service user involvement.
- Provide experience of clinical research in an NHS setting and raise awareness of clinical academic career pathways.

Two cohorts of students (cohort one – three physiotherapy students, six week placement, cohort two – seven speech and language therapists, twelve week placement) a virtual research placement for one day a week. The remainder of their placement hours were with a clinical team.

The students were hosted by the trust's Research and Innovation Team and supervised by our research portfolio manager, Rachel Manning, and myself, as chief investigator of the DoMore study. We developed a training programme using existing resources such as Good Clinical Practice training, resources on the Health Research Authority website, relevant webinars relating to clinical academic research careers and guest speakers. The guest speakers were selected to showcase clinical research projects from the student's own discipline. The students contributed to the DoMore research study (https://do-more.org.uk/welcome).

Work was set in weekly meetings on Microsoft Teams and the students communicated via email or telephone. The students worked individually, in peer groups and in researcher lead workshops online.

The students contributed to designing recruitment materials, supporting recruitment, transcribing interviews and focus groups and undertaking thematic analysis of qualitative data for the DoMore study. They also spent time developing their own research question and hypothetical protocol; applying the training they had undertaken.

We were transparent about this being our first experience of delivering this type of placement. The students were encouraged to be partners in developing practice-based learning, feeding back their experiences and requesting learning they wished to undertake.

Some quotes from our students feeding back on their experiences is given below:

"I was really excited to be involved in the project as I feel it has potential to help people in the future. I wish the placement was longer to further help in the project, as it now feels like it's starting to pick up pace"

"It has given me insight into how studies are run within the NHS environment. It has been great to be able to see our efforts make a positive impact."

"The need to be flexible, innovative and resilient were characteristics that came through and are skills that will be very useful in my future career if I ever decide to go back into research, and maybe pursue a PhD one day!"

Picture Credit: Headway / Unsplash

Anne Killett, Senior lecturer in occupational therapy from the University of East Anglia, explains how she approached a development practice-based learning opportunity in research focused on Social Care.

Model of delivery used

"A third-year pre-registration BSc occupational therapy student approached me asking if she could complete her final 8-week professional development placement with me, as a research active occupational therapist. As I had ongoing funded research projects with a range of activities that the student could get involved with, I agreed. The placement took place during lock-down, but unusually, the projects I was working on were not paused. The student and I met on-line, and the research activities all took place on-line."

How was the practice learning delivered?

"The placement was an eight-week full time placement, one to one student and educator."

How were students and practice educators prepared for this model?

"I prepared the student for the placement by sign-posting her to the RCOT research development strategy, the RCOT Career framework Level 5 Evidence, Research and Development Pillar, and the websites and information about the funded research projects."

How was supervision delivered?

"We met weekly for formal supervision, and at intervals during each week to prepare for the various activities."

How was progress measured?

"The student did an excellent job at developing learning outcomes for herself for the placement, and at showing how these achieved the set learning outcomes required for the placement. The overall learning outcome was to demonstrate understanding of the stages of the research process in health and social care research, and to identify the contribution an occupational therapist could make at each stage in the process. The student got involved in 'public and patient involvement' activities for two projects in particular - DACHA https://dachastudy.com/ The £2.2million NIHR funded DACHA study (Developing research resources and minimum data set for care homes' adoption and use) is an ARC East of England supported study being led by the University of Hertfordshire and ASSENT https://www.uea.ac.uk/groups-and-centres/assent ASSENT - development of an assent-based process for the inclusion of adults with impairments of capacity and/or communication in ethically-sound research - Groups and Centres - UEA (University of East Anglia)."

For further information on these projects, please send an email to Karen Bunning at K.Bunning@uea.ac.uk with your name, area of work/interest and contact details. www.uea.ac.uk

What was the learning from this model?

"There are great on-line resources (Future Learn) to help underpin learning about the research process in health and social care, and these complemented the project experience well. There are regional networks to support the research development of health and social care professionals, and these provided good networking opportunities during the placement (e.g., NIHR Applied Research Collaborations). The research teams made the student very welcome and this offered opportunities for professional socialisation".

Lightbulb moment

"When an occupational therapist recently graduated from the University approached me for a practice learning opportunity connected to a Masters, it was a fantastic opportunity to pair up the students who were at various stages in their careers but a useful source of help and support for each other."

Tips For Educators:

Setting Up A Research Placement

- Flexibility is essential – tailor learning to student's needs. Research is unpredictable. Adapt when things do not go to plan.

- Check in frequently after setting a task. Students can ask questions and it saves time and effort if task is misunderstood.

- Agree how research supervisors will contribute to assessments – written feedback / attending meetings? If meetings - how many and when.

> *"Be clear how the placement differs from research modules / dissertations undertaken as part of course"*.
>
> **Marilyn Bradbury, HEE / NIHR Clinical Doctoral Research Fellow from Birmingham Community Healthcare NHS Foundation Trust**

- Remember that anyone in a research role can supervise students on placement. Depending upon professional body requirements and where learning outcomes are focussed on developing research skills, rather than clinical knowledge, the supervisor may not have to be a registered AHP. For example, an occupational therapy student from the University of East Anglia was supervised by a paramedic who now works in research, with support from a long-arm educator from a different university.

- Look at the available placement types & lengths from local HEIs and establish whether you will offer a full research placement, or a split clinical and research placement. Multiple student models such as 2:1 or 4:1, where the higher number represents the number of students to one educator, are recognised as particularly beneficial for research practice-based learning. Consider what opportunities you might be able to offer and start from there.

> "Having a clinical element can give some stability, consistency and time in a more familiar environment during the research placement for the student, but also gives a good opportunity for the educator to relate learning to real-world examples that the student is involved in."
>
> **Dr Vicky Booth, Clinical Academic Co-Lead, Nottingham University Hospitals NHS Trust, Assistant Professor Nottingham University.**

> "Consider discrete components of the research cycle, their expected duration and how a placement duration fits into this too. Often placement blocks are pre-determined by the HEI and you can use this to think about how a placement will fit within our research project timeline, if already decided."
>
> **Katie Chadd, research manager at the Royal College of Speech and Language Therapists**

- Students could be from different AHP professions or the same profession. Multiple student models promote peer learning and student autonomy and are likely to reduce the amount of time spent in informal supervision.

> *"Upon reflection, I see no reason it would not be possible to have any undergraduate AHP. The principles of research are the same and they work within a big MDT research team, which would facilitate this."*
>
> ***Dr Hannah Young, Specialist Physiotherapist, University Hospitals of Leicester NHS Trust, Honorary Lecturer University of Leicester.***

- Identify who will be the Practice Educator. If organising a split placement, who will supervise the clinical part? How much time will the student spend in each environment and on which days? How will you communicate regarding assessment?

- Identify the primary base for the placement. If the student will be working from home, arrange laptop loan / IT access via remote desktop to ensure that students can access the relevant confidential information and that this access can be removed at the end of the placement.

- Plan for communication and ensure that the student has access to and training for all the platforms that you routinely use, especially if working remotely. Plan how supervision will take place.

- Identify a project that you would like the student to work on, or an area in which you would like the student to develop a project. Make a list of service evaluation & audit opportunities to give choice & autonomy and maximise student engagement.

- For formal research already underway, make a list of appropriate tasks for the student to get involved with.

- Contact the university to identify how much knowledge of research the students may have, e.g., have they completed or currently studying any research methods modules. This will help to indicate what skills students may already possess and what areas to focus on.

- Work together with the HEI to develop the learning criteria and adapt the marking criteria to help overcome any concerns about how the placement will be assessed.

> "We found initially that it was difficult for us as research educators to assess the students on the University marking criteria, which is very much geared towards a clinical placement. Equally this was a concern for students- how would they demonstrate that the research skills they had acquired fulfil the marking criteria? Therefore, we set up a series of meetings and workshops as an educator group and worked with our previous students, the Universities, and our clinical placement lead at the Trust to creatively think about how research placement tasks fulfil the marking criteria. For example, for knowledge and understanding we have asked students to take part in pro/ con debates and for Practical skill we ask students to input and analyse data in various quantitative and qualitative analysis packages".
>
> **Dr Linzy Houchen-Wolloff, Senior Research Physiotherapist, Centre for exercise and rehabilitation science, University Hospitals of Leicester NHS Trust.**

Delivering Research Practice-Based Learning

> *"As in other practice-based learning opportunities, your setting will have a range of potential training requirements that students will need to undertake either prior to beginning their placement or during the first weeks of placement. This will need to be scheduled. Your Research Office will be able to help. Examples of training may include consent and Good Clinical Practice. You may also need to apply for a Research Passport. "The students receive Good Clinical Practice and consent training and are included on the list of investigators which means they can assist with activities such as interviewing, objective testing and intervention delivery"*
>
> **Dr Hannah Young, Specialist Physiotherapist, University Hospitals of Leicester NHS Trust, Honorary Lecturer University of Leicester.**

- Provide the student with appropriate pre-reading and, if applicable, link them up with other students attending the same placement.

- Meet with your students before the start of placement to ease any anxieties and provide a welcome pack and an induction period. Acknowledge that the students may be apprehensive about not doing clinical work. They will need time to become familiar with the structure of the organisation and meet key colleagues and to become clear about the aims and scope of any projects they will be involved with, including things that it is possible for students to undertake on the placement and things that are beyond their remit.

- Provide a timetable (even if it is a work-in-progress) This will help them to understand what the placement will look like. Allow time for reflection and feedback from their educator and for settling in and challenges; it is a learning opportunity for all involved.

> *"Remember that the student isn't getting the informal prompts and cues on progress as that they would normally get from their service users or other clinical staff in a purely clinical placement and so extra time and contact with other researchers and where possible service user and public involvement representatives needs to be built into the schedule."*
>
> **Dr Vicky Booth, Clinical Academic Co-Lead, Nottingham University Hospitals NHS Trust, Assistant Professor Nottingham University.**

- Work with your team to review and refine the placement structure as you go along. Involve the students so, they can contribute their ideas, shape the placement and feel valued. Consider which other team members students could work with and learn from.

> *"Nothing is impossible! A lot of planning is required, but obstacles can be overcome. The key is being organised, having a timetable, being flexible and adaptable at all times. You don't realise until you carry out such opportunities, just how strong your network of connections is. It has been really helpful in ensuring that the practice-based learning opportunities we provide students can be successful."*
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> **Dr Sarah Elliot Consultant Physiotherapist in Critical Care and Research, Medway NHS Foundation Trust.**

- Be flexible and creative in the opportunities you offer students. For example, they can gain a wealth of knowledge from seeing how meetings are chaired and facilitated, how PPI groups can influence the research process, from attending departmental research training and from talking to, and shadowing, other members of the research team. Don't be afraid to be creative and think outside of the box when it comes to the tasks you might get them involved with. Practice learning in research will develop more than just research skills.

> *"Leadership skills such as delegating tasks, decision making, organisation and effective communication are just as important as the ability to critically think, appraise and clinically reason. My role involves both research and leadership."*
>
> **Dr Ben Smith, Clinical Research Physiotherapist, University Hospitals of Derby and Burton NHS Foundation Trust**

"The benefits of developing 'soft skills' on these placements/PBL should not be underestimated either - communicating clearly and persuasively (written and orally), collaborating with others, organisation, time management, working to deadlines and prioritising, networking plus evaluating and presenting information are valuable skills that are important to professional development.

Dr Hannah Young, Specialist Physiotherapist, University Hospitals of Leicester NHS Trust. Read more at Stdent research in action | The Chartered Society of Physiotherapy (csp.org.uk)

"Research practice-based learning offers a unique perspective to position clinical practice in a much broader picture. Student's, on these placements, can learn not only about research, and the close relationship between research and practice, but also the broader policy context and its dependence on evidence. By being able to situate research in this way, the student can widen their lens of the professions and appreciate the bigger context."

Katie Chadd, research manager at the Royal College of Speech and Language Therapists

Picture Credit: Wes Hicks / Unsplash

Tips For Students

- You may feel apprehensive or anxious about a research placement (or a research component to a split placement) in the same way as you would before a clinical placement. Take the opportunity before you start to familiarise yourself with AHP roles in research, you can email your prospective supervisors to find out more information and check how to prepare.

> *"Always keep an open mind and embrace the opportunity to learn in new and diverse ways; you may be pleasantly surprised with how many key skills you will develop."*
>
> **Samantha Nolan, Programme Manager, Health Education England**

> *"My research placement helped me develop leadership, organisation and communication skills in ways that my prior clinical opportunities didn't. I saw how flexible and adaptable AHPs can be in healthcare."*
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> **BSc 3rd Year OT student from the University of East Anglia**

- Approach these practice-based learning opportunities with a "can do attitude." You may be concerned that being in a non-clinical setting may mean you will not develop the skills you need to become a fully rounded and competent AHP. Practice-based learning in research improves your clinical reasoning and your ability to be an evidenced based practitioner. Embrace the opportunity to develop your flexibility, adaptability, professional and clinical reasoning skills; these skills enhance your employability.

> *"Practice-based learning opportunities have been great at helping the team to grow the capacity of research placements within the trust. It enables students to gain an understanding of research and what a job within research may look like for AHPs. It also provides students a sense of fulfilment and satisfaction knowing they are involved in a research project that will potentially shape what evidence based knowledge future practitioners use in practice."*
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> **Helen Hall Research Grants Advisor, Paramedic and Research Champion, James Paget University Hospital NHS Foundation Trust.**

- Depending on the stage of the research project cycle, there are a variety of activities and tasks that you can get involved with including: data recruitment, interviews, literature research and reviews, writing therapy plans based on research participant's data, shadowing experienced researchers and participating in clinical audits.

- It may be a new experience for your supervisor as much as it is for you. Regular meetings with your practice educator will help you make the most of the different learning opportunities. Give feedback and offer suggestions of changes. Don't be afraid to ask for help or ask questions - you are a student and you are there to learn. It may feel very uncertain at first but this is all part of the learning process.

- Contact your educator before you start placement to help you prepare. Ask whether you can meet virtually or face-to-face to discuss what learning opportunities might be available to meet your learning outcomes. This will help calm your nerves and help overcome any feelings of "not-knowing".

- Take time to link with other students in similar settings - you may appreciate the peer support. Peer-learning and regular reflection sessions can be valuable. The GROW model (Mindtools, 2020) https://www.mindtools.com/pages/article/newLDR_89.htm is a great framework to develop coaching and communication skills.

- Even if you feel a research career is not for you, actively engaging in a research placement will be beneficial to understanding how to apply research to practice in a clinical career.

> *"Each week the student/s select a paper to critique in detail and we go through this with them so they gain a greater appreciation of looking out for issues with research quality and how this may impact upon interpretation of their findings and subsequently applying it to practice."*
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> **Dr Hannah Young, Specialist Physiotherapist, University Hospitals of Leicester NHS Trust.**

> *"The placement has given me a more rounded view of Healthcare practice. It has made me think more about the need to remain up to date with the available evidence to ensure I am delivering best practice and raised my awareness that practicing clinicians are able to contribute to that evidence base."*
>
> **Undergraduate research student, supervised by Dr Vicky Booth, Clinical Academic Co-Lead, Nottingham University Hospitals NHS Trust, Assistant Professor Nottingham University.**

"A lot of research skills you could develop on placement will be applicable to clinical roles: service evaluations, auditing, following evidence-based practice. It's a good idea to think about the possible practical applications of your placement to your future career. Make the most of the connections you will make during a research-based placement! I have already begun to spot gaps in the evidence base for Speech and Language Therapy, and this has made me really excited to commence clinical practice, so that I can begin to develop studies to help to bridge those gaps."

Hope Kightley - Speech and Language Therapy Student at Leeds Beckett University. Hope was allocated a research placement with the research team at the Royal College of Speech and Language Therapists in her final year of studying.

Tips For Universities And Education Providers

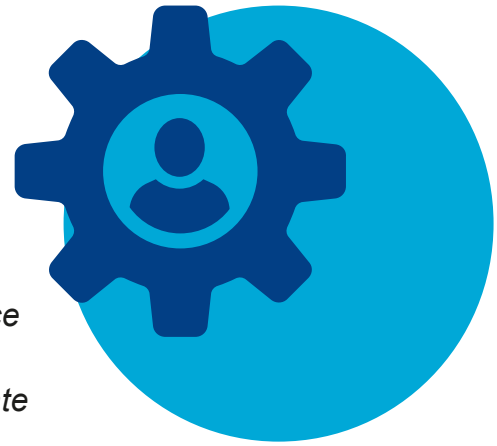
- Practice learning in research is suitable for students from BSc year one through to final year MSc students with projects being adapted to suit various stages of learning.

- Work closely with placement providers to prepare students prior to the placement – the expectations for all parties, use creative thinking to meet their learning outcomes with learning opportunities that are not clinical. Embrace the fact that this is new for everyone. There may be bumps on the journey but obstacles usually be overcome through collaboration.

"Students have learned about a wide range of clinical assessments used in research investigating the impact of neurodegenerative conditions on daily living and families. They have been subsequently trained on the clinical research assessments, shadowed researchers, and then had the opportunity to conduct some assessments themselves, under the supervision from the research team. Students have learned about various aspects of basic research governance, including delivery of research, data collection principles and data management. They have also had the opportunity to join research meetings locally and regionally, either related to the research projects or research events with talks involving national and international researchers."

Charmaine Chandler, Course Director, MSc Pre-Registration Occupational Therapy, University of East Anglia

Tips For Service Providers



"Our future AHP's are a huge benefit to any service, they can help to investigate service improvements and help to develop and implement innovative ideas. Research could take place to investigate gaps in clinical practice or consider new ways of working. This could link to journal clubs where students can translate research into their placement setting. Let them experiment, we are all learning together, skills developed in a research placement could lead to an application for extra funding by means of a research grant. The opportunities are limitless! This is a wonderful opportunity to incorporate a new way of offering practice-based learning in a variety of settings which will directly improve service quality and delivery, helping our communities thrive. "

Samantha Nolan, National Programme Manager, Health Education England. Worked simultaneously with a BSc OT student and BSc physio student

- Allow yourself to learn (and to make mistakes) as you go.
- Create a sense of belonging within a team.
- Empower the learner – do not give them all the answers.
- Embrace the differences between us all
- Pause for thought and evaluate as you go

"Evaluate as you go."

Tamsin Baird, Professional adviser, Chartered Society of Physiotherapy. Worked with four students from four different universities.

Meet with your students before the start of PBL to ease any anxieties and provide a welcome pack and an induction period. Acknowledge that students may be apprehensive about not doing clinical work and working online. They will need time to become familiar with the structure of the organisation and meet key colleagues."

Samantha Nolan, National Programme Manager, Health Education England. Worked simultaneously with a BSc OT student and BSc physio student

References And Useful Resources

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