'Investigating Interdisciplinarity' by the Arts and Sciences (BASc) Department. UCL

The *Arts and Sciences (BASc)* degree is *University College London*'s Liberal Arts course, offering students the opportunity to study a great range of disciplines across UCL. Students combine science and humanities/social science courses according to their interests and take Core modules designed to foster interdisciplinary thinking. The *BASc*'s Core courses have been designed to enable students to acquire the skills and concepts needed to work effectively across multiple disciplines, encouraging students to link traditional UCL subjects in new ways, or to explore the conceptual and methodological differences between arts and sciences.

As part of the first year of the degree programme, students take the *BASc* Core module *Interdisciplinary Research Methods (IRM)*, which introduces students to a range of qualitative research methods, particularly those used in the social sciences and humanities. Being introduced to debates about research ethics, alongside philosophical and sociological views on 'the scientific method', the course encourages students to explore how disciplinary differences play a part in the conception and practise of research, and to consider how method choices form an important part of that process. Situated within a practise of active learning, students on the course engage in a practical interviewing exercise involving data collection and analysis, carrying out qualitative research interviews with different members of the UCL academic community, in turn analysing their results and producing both group and individual assignments in response to their findings.

Students taking this course commented in feedback that not only did they develop "professional skills like communication, initiative and teamwork" but also that the module specifically enabled them to gain "some practical skills for research" which they felt would serve them well in the future. This has proved to be the case, with many second and third year *BASc* students returning after completing internships and summer jobs to comment on the confidence they had experienced in undertaking research and writing reports as part of their industry roles.

Teaching a consolidating transferable skills, IRM also aims, with its primary assignment — the research interview exercise — to provide students with the opportunity to learn in more detail about UCL's research culture, with students taking the lead in selecting which UCL academics, and which type of research practices, they wish to investigate. Central to this learning experience is research-based education and the process of enabling students to connect across disciplines, core tenets of UCL's Connected Curriculum. The CC also encourages a 'throughline of research activity", that is, designing a programme of study which enables students to "experience a connected sequence of learning activities" with "[t]he right balance between compulsory and optional modules" so that "students can make critical, creative connections between apparently disparate elements of their learning" (Fung, 2017, p. 6).

With this in mind, the *BASc* department successfully applied for a *UCL Changemakers* project grant, with the aim of enabling *BASc* students to voluntarily build upon their research interview experiences of IFiM and pursue an investigation into concepts of interdisciplinary research, something which lies at the heart of their own degree programme. A core team of student interviewers was assembled, with small teams grouped according to personal research interests, which in turn enabled each group to focus on selecting an appropriate UCL academic to interview in relation to their own group's academic interests and passions. The project also encouraged students to consider their own research 'outputs' and to consider how best to work together to collect and review their research 'data' — and what form it might take as a final 'output'. This booklet is the result of all our collaborations, and we hope it goes some way to providing a student-led exploration of what interdisciplinarity means in the context of higher education learning and research in today's highly complex and interconnected world.

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Our first interviewee is a social scientist who works as part of the UCL Educational Psychology team. With a diverse background in computer science, psychology and neuroinformatics (a mixture of neuroscience and computational modelling), his work is a great example of interdisciplinarity in action.

He discovered his interest in interdisciplinarity almost by accident while pursuing his interests, which eventually moved him away from his initial subject area of interest that was computer science. He recounts that "suddenly just by talking to people I realized there are those connections and there are

opportunities. Well actually, I guess I first realized it might be possible for me to move to do psychology stuff when I was reading a paper, again just kind of following the literature as an undergrad." In this paper, he realized the connection of concepts between psychology and computer science as he noticed that the paper “had all the logical symbols and log values from computer science and the only difference was that the coordinates on the paper were just not the coefficient”. This reflects the inherent interdisciplinary nature of knowledge fields. Academic disciplines are often seen as self-contained silos with distinct concepts and theories that are confined within it. As a result, the transferability of concepts between disciplines is often not noticed, even though there is often great similarity and/or connections to fundamental concepts of disciplines, as demonstrated in this example.

Moreover, he elaborates on the crossing of disciplinary boundaries through real-life exposure. For his PhD research, he “chose to get a secondary office in the psychology department, so that day-to-day I could just be surrounded by psychologists”. Real-life exposure and observation are the best means of immersing oneself into a subject area and finding real-life connections to theoretical links — to experience interdisciplinarity in action. While disciplines may be seen as self-contained in theory, their application and observation in the real world makes it clear that this is not the case. Knowledge spaces naturally overlap, and bringing in new perspectives from different and diverse disciplines can be a fruitful addition to existing, established disciplinary perspectives and theories. This is made clear in his reflection on his early days of being exposed to and working in a psychology environment: “I could just ask any stupid questions [and I would be forgiven because I didn’t know anything about psychology], which actually turned out to be not so stupid, it's just that they were taken for granted”.

Approaching established facts with new methodologies and mind-sets can lead to new developments and knowledge production: Interdisciplinarity opens doors to opportunities that wouldn't otherwise be available and draws out connections that couldn’t be perceived without it. For this to occur, however, it is essential for the lines of disciplines to be blurred, blended and transgressed.

Unfortunately, much like people, academic disciplines, too, suffer from stereotyping. These academic disciplinary stereotypes often limit the scope and capabilities that are assigned to a particular discipline.

An anecdote shared by our interviewee about an incident in the staff room of the psychology department illustrates this nicely: “I was chatting to someone who was maybe one and a half years through the PhD, so midway through his PhD, and he looked at me and he suddenly said, “oh I didn't realize you work in psychology until just now!" and it was almost like an accusation, like ‘what are you doing here?’, you know.”

Interdisciplinarity aims to break down these boundaries. Many people have fixed notions of what a certain discipline comprises, and consequently who can participate in or study it. However, these conceptions are erroneous, as many disciplines, such as psychology, are inherently interdisciplinary and thus invite participation from diverse subject areas. He speaks of gatekeepers between disciplines, for instance those who study classical psychology and pursue the “pure roots”, and others, like himself, who introduce new disciplinary perspectives and approaches.

In a world where one may sometimes get the impression that everything has already been done, turning to interdisciplinarity can open up a whole new horizon of possibilities. Indeed, our interviewee feels that interdisciplinarity gives him "permission to work on different projects in a way". It unlocks new possibilities that cannot be pursued through mono-disciplinary studies. As an interdisciplinary researcher, one can mediate between different disciplines by being able to verse the ‘languages' of the disciplines, by translating, transferring and ultimately transforming their content into new knowledge.

He concludes with the idea that for things to be applicable and helpful in real life, they must be interdisciplinary. This may especially be the case in modern society, where knowledge must be combined in order to face and solve the complex challenges and issues that we face. He gives the example of cognitive science, where there is a definitive need to collaborate to understand how the mind works, as it is a very complicated phenomenon. “The interdisciplinary diagram of what cognitive science is has been anthropology, cognitive psychology, computer science, AI, sociology, education... and so it was clear to a lot of people that we need to collaborate otherwise we can’t do anything."

Single subjects alone cannot face such complex matters, and people from different fields of expertise, equipped with distinctive tools of thinking and knowledge organization must mix, as this encourages them to become more interdisciplinary and find bridges between disciplines and concepts.

Being interdisciplinary does not mean needing to be an expert in everything; rather it stipulates being well-versed in a select few disciplines or fields of knowledge, while simultaneously possessing a broader, more facile range of knowledge, awareness and interest in other disciplines. Thus, interdisciplinarity may be recapitulated by the phrase “jack of all trades, master of some”.

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Our second interviewee is a clinician and HIV specialist. Amongst other things, she studied medical anthropology, acquired knowledge in sociology from one of her PhD supervisors and focused on academia and medical research. She balances clinical work at the NHS, which is immediate work, and research, which is a long-term process. By combining these elements, she has a very interdisciplinary profile in terms of methods and fields of interest — “research interests are... more diverse than I guess what my official training has been". However, there are two distinct differences between these areas of work; “in the NHS everybody’s end point, or focus, is the same. It’s the patient. We all [...] want what’s best for that individual. Whereas in research, it’s a little bit, not as collaborative, because we’re not all working for somebody external to ourselves.”

The medical field in itself is inherently interdisciplinary, for instance “if you’re trying to do some kind of health service evaluation you’re going to need an economist, first and foremost. Money is [...] important, you know, you want to demonstrate that things are cost effective as well as effective." Additionally, a sociologist and/or anthropologist would be needed to work on data to “answer the ‘why?’ questions”. Thus, the field involves expertise from disciplines as diverse as epidemiology, statistics, biology, medicine and sociology. Without this interaction, the field and the application of the knowledge generated therein, would be lacking. The interviewee elaborated on the importance of this collaborative approach. Professionals from diverse educational backgrounds can highlight starkly different aspects of the same matter. People from dissimilar disciplinary backgrounds raise issues “that you hadn’t considered [before] and expand" on them.

The interviewee observed this in the differing approaches between students of diverse academic backgrounds, noting that “I find that, with the people | work with, but also find it when I teach, because I find the students are very different. Medical students are very different from the students I teach on the Migration and Health module [*BASc* students], and they will ask different questions”. Indeed, the “questions are an important part of it. And if everyone’s from different areas... you get different kinds of questions”.

She also raised an interesting point concerning the unique use of language in discourse about particular subjects when explaining concepts to different audiences and “trying to make people understand” them. This reflects how interdisciplinary collaboration can lead to new perspectives and discourses on the same subject. This is mirrored in the professional world of medical practices, where a MDT (Multidisciplinary Team) is a common, accepted practice; “you’ve got your physio, then your nurses and your psychologists and your pharmacists. And you know, we all bring in our various areas of expertise”.

According to the interviewee, mixing methods means that “you need to involve people from many disciplines”. This interdisciplinary work generates a “holistic overview” that is not only much more interesting, but more “meaningful", since “it enables you to provide” a broader overview “of what you’re trying to explore”. Indeed, this cannot be achieved when operating within a mono-disciplinary approach. The holistic approach combines both depth and breadth, both of which are essential in the modern world and “make us more rounded”. In order to perform efficient, cross-disciplinary work, the interviewee advises that when operating in a qualitatively-based research environment, an “ability to critique papers and read papers that are more quantitative” is desirable.

While she supports the shifting emphasis on more interdisciplinarity and cross-disciplinary work in academia, she also highlights the issues one can face when using an interdisciplinary approach in research. The evaluation of material is one such limitation, relating to the problem of finding the right balance between breadth and depth. The problem of interdisciplinary work is that “often when you

read out [of] your comfort zone you don't necessarily know how to think about whether what you're reading is valid and robust".

Furthermore, while teamwork can lead to more fruitful outcomes, it is an essential prerequisite for interdisciplinary work and it can be difficult to source people willing to collaborate. This makes the entire research project dependent on others.

As the interviewee testified, "it's hard to put your first toe in the water because you don't know who to approach". The dependence on collaboration with others can also be problematic when disagreements concerning the focus of the work arise due to differences in interest of the direction of the work. Nevertheless, the interviewee observed that this tends to be "more personality-driven rather than disciplines driven". This suggests that interdisciplinarity may not be for everyone. From experience, the interviewee found that "when I work... I mean there's some people who I know are very good at what they do but they're just not flexible enough to see how... the other components are necessary to be in a certain way".

A further limitation of interdisciplinary research is the "danger in it being very output-, and outcomes-, driven." This includes timelines as "you're forced to demonstrate outputs in a way that you might not be able to do, for you know 5, 10 years". This can erase the benefit of the unpredictable aspect of interdisciplinarity — "all those little quirky things that suddenly just unfold into something wonderful, but that you might not see where it's going to, initially". Thus, she encourages spontaneity and adaptability while researching. Unfortunately, this can also make it difficult to get funding. After all, "you need an idea... and you need money".

Nonetheless, the interviewee has "great faith" for an interdisciplinary future. She encourages starting the development of a broad, interdisciplinary knowledge base from an early age on, helping avoid the stereotypical categorization of knowledge into distinct disciplinary silos. Crucially, it is important to consider that interdisciplinarity is a method of "how to gather knowledge and process it. [...] it's not the specifics, you know. We don't stop learning, it's those skills that we develop and the process." Consequently, it requires people with a love for ongoing, lifelong learning, like the interviewee, who said that she "could easily be an eternal student". Could you?

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Our third interviewee discussed interdisciplinarity in terms of a systems framework, particularly focusing on legal systems and how they transcend disciplinary and geographical boundaries, but also considering educational systems and lastly, collaborative and methodological systems. The interviewee highlighted the inherent interdisciplinarity of the field of law, which inevitably studies interconnected concepts and disciplines including politics, diplomacy, policy-making, economics, sociology and history, to name but a few.

Despite this interdisciplinarity and interconnectivity, one can choose which lens to adopt in the study of particular issues. For instance, "politics, policies and law" all share a "legal requirement" through which "the reality of the lens of politics and policies" can be studied. While knowledge is traditionally allocated into distinct containers with various accepted knowledge domains (known as academic disciplines), these are mere social constructions. They are enforced through epistemological and intellectual categorization of knowledge, for instance in academic departments (Becher, 1989, pp.3-19). However, the boundaries of knowledge cannot be fixed in specified disciplinary realms (Ibid, p.19). Situating oneself into an a priori disciplinary realm limits the scope and analysis of the investigation, for which reason interdisciplinarity provides a more integrative, fruitful approach of research (Barnett, 2000, p.72).

Having conducted research on comparative law in the UK and China, the interviewee realised "that the world not only is globalised but that we have an interaction, a lack of disciplines". This demonstrates that interdisciplinarity is not only limited to surpassing subject-specific realms, but that it also transcends geographical boundaries. This likens to Becher's (1989, p.23) notion of academic disciplines as tribes and territories that fight as a means of defending and defining their theoretical and methodological borders. Indeed, the interviewee spoke of "a global mind" as a tool for interdisciplinarity. He stated: "I learnt Chinese, I learnt French, I learnt English and obviously Italian," believing that one can "[study] by travelling" and thereby "[travel] by studying".

Another system mentioned by the interviewee was the education system, observing that the “advantage...of the British system” was its opportunity for interdisciplinarity, where a combination of subject areas can be studied. The *BASc* encourages this by teaching students to combine and bring together various disciplines, methods, expertise and perspectives. While this may not produce traditional, disciplinary expertise, it instead generates proficiency in teamwork and collaboration and open-mindedness, while moreover generating the opportunity of drawing together knowledge and thereby forming new, original ideas - the key for the development of future research.

However, certain considerations of interdisciplinarity and its application also arose in the interview, namely the balance between expertise and interdisciplinarity, and the relationship between pragmatism and romanticism in the application of interdisciplinarity. The interviewee believed “that you need to have a solid background in your own field and to be very humble but serious [...] and to be open to trying to open yourself up" to different fields and related areas. This is particularly significant when collaborating in interdisciplinary groups, where “it is important to respect other people and to work towards yourself,” even when there may be differences in opinion or methodology. This raises the question whether there is an ideal threshold or balance between expertise/specialization and interdisciplinarity that would make for the most effective and fruitful interdisciplinary collaboration and research.

He advised to “try and create a common ground of research where everyone is [...] grounded in his own knowledge and try to see what is behind the solution”. This suggests keeping an open mind to different approaches and knowledge from different disciplinary realms, whilst simultaneously specializing or focusing on a particular subject area. Indeed, it is important to have a good, fundamental grounding of knowledge, as without this it is impossible to find intricate, interdisciplinary connections, and to apply concepts in a cross-disciplinary manner. The combination of expertise and in-depth knowledge, as well as a broad knowledge base highlights the importance of collaboration and teamwork in interdisciplinary work. "It takes time to become an expert in a field" and it is not feasible to be a specialist in everything; “that’s the reason why interdisciplinary collaborations are [so] important”. He emphasized the notable importance of “individual collaborations” over “institutional collaborations”, perhaps because this allows for greater flexibility in expanding the realm and methods of the research.

However, the use of methods can be particularly problematic in interdisciplinary collaborations, as the interviewee has experienced first-hand through his own research: “the learning methods, sometimes, from a lawyer to an engineer or a lawyer to a policy maker is different [...] so I had to abandon, from time [to time], the pure legal route and instead embrace a more compar[ative] method.”

Different disciplines favour particular methods of operation; however whether qualitative or quantitative, these should not be viewed in a hierarchical sense. This leaves all methods to be viewed as equally valid, yet with differing degrees of suitability and usefulness according to the context and application. Moreover, “friction is not a negative thing”; rather “it is the nature of things”. In fact, it can be constructive because it invites interdisciplinary discourse and discussion, thereby opening up the field of opportunities and possibilities that can be adopted or adjusted in different disciplinary contexts. As a result, more fruitful approaches can be achieved, informed by knowledge or methodology that may not have been considered before.

A possible danger of interdisciplinary work is its potential to become too idealized by venturing too far away from having a focused, grounded research aim as a result of the many possibilities that interdisciplinary research can take (e.g. in the combination of disciplines, methods, collaborations, etc.). Concerning this debate between pragmatism and romanticism in the application of interdisciplinarity, the interviewee stated that, “being pragmatic can only take you so far because unfortunately you need some intellectual strategy and the interdisciplinary approach gives you that. Being too romantic, on the other point of view, is that you can’t see how to apply this interdisciplinarity or intellectual strategy to situations like a career, for example, or a specific job."

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Our final interviewee, in his own words, describes his research as involved in exploring “people and the environment, and how they interact." With a background in music, transport planning and civil

engineering, it is not surprising that he views interdisciplinarity as a particularly useful cue for orientations in future research, noting that “I've worked for years with philosophers”. His rich and detailed descriptions of his own research suggest that he intrinsically perceives the benefits of disciplinary fusions, noting that “where one discipline is posing a challenge to another and there is intermingling [...] actually out of that will come something advancing both disciplines".

Though this might appear to sound the death knell for single disciplinary research tool, in fact he feels that this collaborative approach is “very, very, new, and actually it is way in front of the research world. In the research world, suddenly funding is very, very difficult to get because they always go down a very disciplinary route [...] and often they will say 'oh you mentioned interdisciplinarity and what you have to show is excellence and advancement in both disciplines' whereas actually you might be asking, in a uni-disciplinary way, a very basic simple question, and it is the combination that makes it interdisciplinary...So that is one problem, and I think that the other is that the reason, educationally, the research world is like that is because we teach like that. And so, I think we should change the way we teach, so I would take disciplines out!” In which case, what might we end up with? And how might we go about such approaches?

Our interviewee was clear that it might not be as simple as his initial answers suggested: “I think it’s an interesting challenge. To get there is a different question, but where I think I would want to get is where you would not be thinking about a discipline in particular. You would be saying 'I need to know how does this work?', for example, and what you learn is then the state of being able to look at that as something you can take apart intellectually and be able to say 'well what I need to know is a bit of that and a bit of this, a bit of maths and a bit of physics and something else and so on' and you can put the problem together. And then you can make that a much more normal way of people thinking so the education is about how you learn, how you observe, how you do curiosity, and find the things that interest you. And that is very much the sort of Leonardo Da Vinci sort of school of thought, and I think that is what we should do. You sort of learn that stuff and then you might say, 'well actually I don't think I'm particularly good at numbers, and what I need to know is how do I express that in a form that makes my point?’ So it’s a little bit like me going to an ophthalmologist and saying 'hmm, I have little a question here. Can you answer this question?‘ and nobody's ever asked that question before. And that's good because I've come from the outside and if I had the insight of ophthalmology, I would not have asked that question, almost certainly [...] it’s what I would call a sort of allocentric sense of being able to place yourself somewhere else and look at it from that perspective. And the more of those you can do, the more you can actually create the full picture of the world. So I think that's what it would be.”

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As it may be clear from the expansive range of answers our interviewees generously offered to us, interdisciplinarity as an approach cannot be characterized or defined in particular terms. Our interviewees, despite coming from a very broad range of disciplinary backgrounds and with research methodologies shifting back and forth between quantitative and qualitative worlds, had remarkably similar things to say about the contemporary value and importance of interdisciplinary approaches, especially in light of the complex suite of problems we face as 21st century citizens of a global community. Such responses, we hope, go some way towards demonstrating that interdisciplinarity is not merely a method or means of operation, but a way of thought.

Fundamentally, there appears to be no prescription for what makes ‘good’ interdisciplinary work. Particular research projects or problematisations may require different levels of cross-disciplinary collaboration, individual specialization and expertise, teamwork and collaboration, to name but a few of the specific elements that our respondents felt summed up interdisciplinary practices. Perhaps the beauty of interdisciplinarity is the ability to specifically tailor this grand approach to any and all forms of research problems, with differing degrees of interdisciplinarity and specialization, as required?

Our respondents emphasised how the transferability of discipline-specific concepts could often go unnoticed, despite the natural overlap between knowledge spaces. New perspectives can bring in fresh outlooks on existing problems, highlighting the necessity of welcoming outsiders and ‘alien’ approaches, allowing for such problems to be questioned in previously unconsidered manners. In some ways it can be seen that interdisciplinarity reflects the intricate and entangled realities of our everyday, real life worlds. Interdisciplinarity means recognising that we are active participants in a

multitude of communities, both localised and global, which require a diligent engagement with the world around us. Hence, a collaborative, open-ended and open-minded culture of research, where teamwork is characterised by a dialogic approach, and extemporarily is allowed to flourish.

Taking an interdisciplinary approach when problematising learning, it is possible to see how UCL's Connected Curriculum works towards applying these theoretical underpinnings in practise. Materialising "a vision of a well-tuned learning project, working at once on the personal, institutional and societal levels" is the university's goal, and Fung (2017, p.19) proposes the following tenets as a means of actualisation:

1. To deliberately immerse students "to multiple views of the world (create different socio-cultural/educational societies, promote interdisciplinary activities, harness experiences of all the students in teaching and learning, value alternative worldviews, use comparative approaches to teaching)"
2. To make universities "democratic meeting place[s] where the encounter of diversity (in terms of gender, maturity, culture, nationality) creates opportunities to develop new competencies, knowledge and understandings."
3. To encourage collaborative learning through "communities of practice, group work, workshops, seminars [...] which exploit the diversity within the student body."

We hope this booklet is able to demonstrate the process of interdisciplinarity in action by demonstrating these tenets in the context of research-based education. Indeed, this booklet is an embodiment of the above principles; as students we immersed ourselves into aspects of UCL's Connected Curriculum by demonstrating that applying research-based education is practical and possible. Perhaps the greatest lesson learnt from this is that even with subject matters spanning radically diverse fields, such as law, psychology, civil engineering, health and epidemiology, there are similarities nonetheless — in this case the propagation for interdisciplinary approaches to research.

The fruit of teamwork by a group of *BASc* students from varying academic and cultural backgrounds (previous schooling, *BASc* pathways, year of study), this booklet allowed for the incorporation of diverse worldviews and approaches to the research. The diversity of the student team is mirrored in the interview questions that were posed to the UCL academics, especially in terms of the subject areas that the students had been exposed to as part of their studies. Diversity was also reflected by the interviewed academics, whose wide-ranging interests and methodologies guided their approach and answers to the interview questions.

It might also be seen that this booklet exhibits a Connected Curriculum approach to teaching, as the creation of this piece of work was an extension of the *BASc* core course Interdisciplinary Research Methods, giving students the opportunity to explore and apply in greater depth, and with greater flexibility (without the confines of assessment-focused outputs), the concepts learned in the module in a real-life context. This not only demonstrated the relevance and applicability of the module in the real world, but strengthened and deepened the students' skills in a memorable way.

Thus, the creation of this booklet exposed students to a real-life learning opportunity in which they themselves acted as their own teachers; each student freely designated how much of their own time to contribute, and which aspects of the work to focus on, in turn shaping their own learning experience and exploration of their interests. The research was primarily student-led, as students were given the opportunity to develop ideals and research interests as desired, while the involved leading academic acted as a democratic guiding figure, encouraging the investigation and divergence into related subject matter. The flexible nature of the interviews allowed for this, permitting students to ask academics questions that corresponded to what they found interesting and engaging, rather than following a prescriptive task description.

In some ways, interdisciplinary collaboration lay at the heart of this project, drawing as it did on the different areas of interest and expertise of the student team during the various stages of this project, for instance writing interview questions, conducting interviews, transcribing, writing, editing, illustrating and formatting. This approach of research-based, collaborative interdisciplinary work is intrinsically encouraged and fostered within the *BASc* programme, through assessments such as vlogs, podcasts or group research proposals that embrace and indeed require the combination of different disciplinary expertise, perspectives and methodologies.

The *BASc* student body itself is in no way homogenous, with each student possessing unique areas of interest and expertise, and it is exactly this diversity that is fostered and needed in the *BASc* programme. The greatest lesson learnt by *BASc* students is, perhaps, that for things to be applicable and helpful in real life, they must be interdisciplinary.

However, it's also important to note the distinction between interdisciplinarity and multidisciplinary. Interdisciplinarity is far more than just gathering knowledge from different disciplines; it is the synthesis of ideas and knowledge to build and expand on existing concepts and produce innovative knowledge and expertise.

Interdisciplinary thinking is increasingly in demand, with jobs in sectors like health, policy-making and environment relying on the expertise of people from varied academic backgrounds in order to make well-informed decisions that consider problems and solutions from unique perspectives. Interdisciplinarity, therefore, is challenging existing boundaries of the traditional ways of perceiving the world. By introducing and incorporating knowledge from the arts into the sciences and vice versa, the traditional concept of academic disciplines is transcended and the indispensability of both qualitative and quantitative knowledge is demonstrated.

UCL's *Connected Curriculum* embraces this approach of research-based education, which is, moreover, exemplified in the *BASc* programme, engendering as it does a truly interdisciplinary education by allowing students to explore a multiplicity of subject areas, methods and methodologies in a structured manner, through the organisation of major and minor pathways. Students are thus enabled to gain breadth as well as depth of knowledge, allowing for in-depth study of subjects of interests while simultaneously permitting for interdisciplinary connections to be explored and pursued.

In the fast-paced, modern world, an interdisciplinary framework of knowledge is necessary for a fruitful future that transcends the limits of the ordinary and pushes the confines of traditional, discipline-oriented education in order to strive for a connected curriculum that unites both disciplines and people, with the aim of maximizing the power of knowledge and its application in the real world. The *BASc* prepares its students for this. Are you ready for the challenge?

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