Comparison of Students' Views across Police Entry Routes:

Report for Lancashire Constabulary

Dr Nathan Birdsall, *Research Fellow at UCLan*

Dr Emily Cooper, *Senior Lecturer at UCLan*

Dr Rebecca Fish, *Research Associate at UCLan*

Prof Paul Blackledge, *Lecturer at UCLan*

Prof Sarah Kingston, *Professor of Policing at UCLan*

Cathy Martin, *Training Evaluation Officer at Lancashire Constabulary*

Michael Constantine, *Senior Lecturer at UCLan*

Phil Coope, *Senior Lecturer at UCLan*

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Executive Summary

Police Education is undergoing a revolution. Beginning with the recognition in the 1980s and 1990s that traditional policing methods had little or no impact on crime rates, there has been increasing pressure over the last few decades for a shift towards evidence based policing. In Britain a key moment in this shift was the launch of the Initial Police Learning and Development Programme (IPLDP) in 2006. However, though this programme was intended to educate police officers in the ways of evidence based policing, its inheritance of a predominantly training culture and alongside its limitations as a Level 3 qualification, meant that IPLDP effectively marked the opening of a process of change rather than its realisation. The next step on this process was the launch of Police Education Qualifications Framework (PEQF) as a series of connected degree level programmes (Level 6 qualifications) in collaboration with several Higher Education Institutions (HEI's) including UCLan. Alongside the launch of a standard undergraduate degree in Professional Policing, two on-the-job programmes of learning were created: a three year Police Constable Degree Apprenticeship (PCDA) culminating in a Level 6 qualification for non-degree holding applicants to the police service alongside a two year Degree Holder Entry Programme (DHEP) for those officers who already held a Level 6 qualification.

The present study is intended to measure the response of trainee police officers undergoing the new education routes. Lancashire Constabulary conducted surveys at three time points – after one week, twenty-four weeks and thirty four weeks of the courses – to allow for a comparative assessment of attitudes towards the IPLDP, PCDA and DHEP courses. This data analysis was carried out by colleagues from UCLan.

There were two standout features of the data: First, IPLDP, PCDA and DHEP students all had very similar experiences, both positive and negative, across the three courses. This is particularly interesting given that the launch of PEQF provision at UCLan was quickly followed by the Covid Lockdown, with its attended and previously unforeseen shift to online learning. This is contrasted to the IPLDP cohort which began in 2018 and was not adversely affected by national lockdowns, meaning students underwent a 'normal' period of training. Positively, all three cohorts enjoyed their learning experience, especially roleplay and scenario based learning, and praised their tutors. Negatively, all recognised problems of work-life balance. This problem was more pronounced amongst PEQF Officers who had more academic

demands on their time, and suggested the need for more time and resource given over to their education both by UCLan and Lancashire. Second, while all three cohorts expressed a commitment to evidence based policing, the IPLDP students expressed concern that they had insufficient opportunity to critically reflect on what they had learnt. This concern suggests that PEQF marks not only a step in the right direction, but it is one that fits with the hopes and expectations of the new police recruits.

Overall, the study illuminates real strengths of PEQF provision as an evolutionary development of IPLDP from which officers should develop a critical understanding of evidence based policing. PEQF seems to be working despite lockdown, though this study does point to obvious areas for improvement including more protected time for student officers to learn, more scenario based teaching, better lecturing, less online provision and more time for critical reflections on that which is being taught and learned. Whilst increasing numbers of students undergoing PEQF will mean meeting these needs will be difficult, the current report provides an evidence-base from which such improvements can be made to benefit PEQF students in future.

Introduction

A major overhaul of police education took place in 2016 with the introduction of the Police Education Qualifications Framework (PEQF) by the College of Policing (CoP). This framework establishes three different routes into bachelor (HE6) level degrees (apprenticeship degree PCDA, pre-entry policing degree, and Degree Holder Entry Programme DHEP) as the qualifying standard required to enter policing in England and Wales (College of Policing, 2016). PEQF is considered a 'radical shift' in police education towards mandatory degree entry qualifications (Brown, 2018:9). These education changes developed in response to the National Police Chiefs' Council's (NPCC, 2016) Policing Vision for 2025, which highlighted the increasing complexity of police work, thus the need for a more structured and Higher Eduction provided evidence-based program of teaching that reflected 21st century crime, criminality and victimisation (Fielding, 2018). The requirement for such recognised qualifications aligns policing with other professions such as social work, nursing, and teaching. Each degree is informed by the College of Policing's core curriculum requirements to ensure consistency in skills, knowledge and behaviours obtained by officers, thereby standardising curriculum content across constabularies nationally.

As part of the PEQF delivery, UCLan also agreed to provide an evaluation. As part of this work, a project to analyse pre-existing survey data collected by Lancashire Constabulary was tasked to research active members of UCLan staff who were seconded to the Evidence-Based Policing (EBP) hub at Lancashire Constabulary. The use of the seconded team allowed for effective collaboration between the police force and university, since the research staff were already embedded within the force with existing vetting, IT access and management mechanisms.

To practically conduct the research, the team liaised with the Learning and Development Department at Lancashire Constabulary to collate the survey data that had been collected by the Training Evaluation Officer on behalf of both Lancashire and Cumbria Constabularies. The survey data related to a Lancashire Constabulary designed survey instrument which was (and continues to be) administered to students undergoing the various forms of police training. Survey responses were collected over three distinct timepoints: end of week one; end of classroom phase; and, end of tutor phase. The focus of this report was solely on data

pertaining to Lancashire Constabulary students only. A proposal for analysis was formed and data organised in early in 2021, whereby analysis of the data officially began in May 2021.

The analysis aims to contrast metrics and feedback across the two main PEQF cohorts (Police Constable Degree Apprenticeship (PCDA) and Degree-Holder Entry Programme (DHEP)), alongside the Initial Police Learning and Development Programme (IPLDP) to understand the experiences of students undergoing each course. In order to collect their views, surveys (those of focus within this report) were administered across three timepoints for each of the three cohorts. The first related to the 'end of week one' and was administered on the Friday of the students first week of their respective courses. The second timepoint was labelled the 'end of classroom phase' and related to survey administration on week 24 of the students' respective courses. Specifically, for PCDA and DHEP this related to administration part way through teaching block 2, just before the students went on supported deployment/2nd tutor period. The third timepoint was labelled the 'end of tutor phase' and related to survey administration at approximately week 34 of each course, just before the students went on two weeks of annual leave. All timepoints involved surveys that asked students about their experiences since the previous survey.

In summary, this report focuses on providing an overview of the survey responses, both quantitative and qualitative, across the three timepoints. It is important to note that the courses are ongoing, whereby it is expected that two further timepoints will be subject to the survey dissemination. However, as the courses are ongoing, the report provides a breakdown of timepoints one to three individually, before providing a final chapter examining differences in metrics and themes. Because the analysis focuses on the data as individual timepoints, it will be possible to provide a follow up report(s) in future that examine timepoints four and five individually, before then re-running the same analysis including data from timepoints one to three to provide a holistic understanding of the students views across the full length of their respective courses.

Literature Review

This literature review provides an overview of the development of the new Police Education Qualifications Framework (PEQF) in England and Wales, initiated by the Neyroud report in 2011. The literature will include information about the rationale behind the PEQF implementation, details about the required qualifications, and responses to its roll out, as well as some early indications from ongoing evaluations.

Neyroud's review of police leadership and training (2011) recommended the advancement of police 'professionalisation', including the requirement for a 'professional body of knowledge' to align the police with other professions such as nursing, teaching and social work (see also Brown, 2018). Therefore, professionalisation involves the development of evidence based policing and graduate qualifications, and is described as a way of allowing officers to take responsibility for their own training, in order to gain the knowledge and critical thinking skills that facilitate complex risk assessments and accountable decision-making (McCanney *et al*., 2021).

Further, The National Police Chiefs' Council's (NPCC) Policing Vision for 2025 highlighted the increasing diversity and complexity of police work, and the need for a more sophisticated response to these developments

> *Policing is built on our people. There is a need to add critical new skills to the service, get the right mix between officers and staff and be more representative of the communities we serve to achieve our vision. Changes to the culture and leadership of the service are vital if policing is to innovate at the pace required*. (NPCC, 2016:8)

The challenges they forecasted include: a necessity for police to be more embedded within communities and digital technology, a need for police to use autonomy to make decisions about the handling of vulnerable individuals and situations, the ability to collaborate with other agencies, and to be accountable - ensuring that protection and safeguarding is in place (National Police Chiefs' Council, 2016). Further, policing increasingly requires practitioners to: be able to think critically and exercise judgement, challenge accepted norms, contribute to the evolving evidence-base, work with a high degree of autonomy, and communicate effectively (College of Policing, 2020a). These challenges are part of a wider social context in which various forms of media are encouraging people to be suspicious of police and state

authority. Police must therefore be prepared to deal with public expectations that combine notions of public protection, vulnerability, risks and rights (Heaton *et al*., 2019; McCanney *et al*., 2021).

After a review of the policing curriculum, serving officers at constable rank were found to be working at degree level (National Qualification Level 6). The College of Policing aimed to provide consistent national education and accreditation levels for policing roles, which they believed would also reassure the public about the level of training police officers have. The intention was to involve the development of opportunities for existing officers and staff to gain accredited and publicly recognised qualifications equivalent to their level of practice or rank (College of Policing, 2016):

> *Policing must present itself as a direct competitor to other graduate programmes in order to become the sort of profession that is regarded just as highly as law or medicine, and for that it has to make clear that the qualities of leadership and communication often associated only with higher ranks are required of every officer.* (Spencer *et al*., 2014:11)

To address these requirements, the College of Policing introduced the Police Education Qualifications Framework (PEQF) in 2016. This is a new national framework for the professional training of police officers by rank from constable to chief officer. Based on a curriculum of operational training underpinned by theoretical information, a key element is that all new recruits are required to have a relevant degree level qualification either before recruitment, or in their first years of service. Currently focused on new joiners to the police, the PEQF was developed to cover the range of professional training, including staff and officers at all levels. A key goal was that by 2020, all police officer recruits were to either possess a qualifying degree in policing, or enrolled on a qualifying degree course (College of Policing, 2020a) although this outcome is still to be met in some forces.

The PEQF incorporates the introduction of three new entry routes at the rank of constable, as well as programmes for special constables, and master's level qualifications for senior officers. All new officers will need to achieve Independent Patrol Status and Full Operational Competence during their period of probation. The entry routes are:

- **Degree-Holder Entry Programme (DHEP).** This is a two-year practice-based entry programme for degree holders (in any subject other than the Degree in Professional Policing). Recruits will be required to achieve a graduate diploma in professional policing practice as well as work-based competence requirements while they are on probation.
- **A pre-join degree in Professional Policing**. This is a self-funded pre-join undergraduate degree, accredited by the College of Policing. This entry route will require no additional academic accreditation for the recruit and involves a shorter on-the-job training programme to satisfy the work-based competence requirements.
- **Police Constable Degree Apprenticeship (PCDA).** This will enable those who join without a degree to study for a policing degree whilst earning a wage on probation. These recruits will be required to achieve their degree, along with satisfying work-based competence requirements, during a three year probation period. (Adapted from Strong, 2019).

The Policing Vision 2025 highlighted a need for consistency, accreditation, and defined roles that recognise and acknowledge specific skills and knowledge, backed by qualifications. The service recognised the need to standardise entry requirements, learning provision, and support as a priority. The framework aims to recognise the level at which police officers operate, provide a framework for and standardise the learning provision across all forces; in particular the initial learning for newly recruited officers, as well as allowing existing officers to achieve transferable and recognised qualifications (College of Policing, 2020a). The degree modules include the development of skills in problem solving, critical thinking and analysis, reflection, independent decision making and deploying effective evidence-based practice. The resulting curriculum has been ratified by education bodies including the Institute for Apprenticeships.

The rationale behind the perceived need for degree level education is that higher education influences the way an individual is able to 'critically evaluate the world from different perspectives, to make explicit underlying theories of change driving individual and organisational behaviour, and to engage in problem-based thinking' (Simmill-Binning and Towers, 2017:5). Simmill-Binning and Towers comment on the increasing emphasis in many forces on vulnerability, resource management, and evidence-based policing, showing how

education, training and learning have a key role to play in the process of cultural change and professionalisation.

Brown (2018) describes the following concerns as drivers to the involvement of HEIs in police training:

- Reform of the police culture implicated in corruption and malpractice
- Responding to the changes in the complexities and types of police tasks
- Offsetting crises of public confidence
- Improving the standing and status of policing
- Economic downturn and austerity measures.

Brown's analysis suggests that graduate education's contribution to the professionalizing and modernizing agendas was anticipated to change the dominant occupational culture, improve integrity and efficiency, and bring about cost savings.

Research on police education in collaboration with universities

Police collaboration with academia has a long history (see Tong and Hallenberg, 2017). Prior to the introduction of the PEQF, research investigating experiences of officers' degree education described an 'us and them' attitude, showing conflict in cultures between police and academia, as well as between academic and practitioner lecturers (e.g. Lee and Punch, 2004; Macvean and Cox, 2012). Indeed, Heslop (2011) found that some lecturers can be condescending towards the police and there was a sense that the police studies students felt separated from other degree students, culturally and spatially.

Such attitudes are linked to the perception of the police officer as 'craftsman', and the skills as therefore learned through practice, out on the streets:

> *In the closed world of policing that values above all else solidarity, action-oriented pragmatism and practical mastery of "doing the business", it comes as little surprise that the social analyst or critical criminologist is firmly cast as an "outsider", who is dubbed "naive" or "anti-police".* (Lee and Punch, 2004:235)

Initial concerns raised about the introduction of the PEQF during the consultation period reflected these concerns, including questions about:

- how police knowledge would be quantified to fit degree metrics
- the process for accreditation of current officers, including time and financial constraints
- how those with and those without a degree would be accepted into the force
- the continuing importance of experience and practical skills as an appropriate indicator for suitability rather than a degree
- concerns that the initiative was a cost-saving exercise in response to austerity (Simmill-Binning and Towers, 2017; Tong and Hallenberg, 2017; Wood, 2020).

The often-cited claim from within the profession states that police officers need an abundance of common sense and not higher-level learning; suggesting that these cannot coexist (Leek, 2020). The perceived gap between theory and practice has led some commentators to suggest that degree modules should be more practice-oriented; however, as Lee and Punch (2004:247) argue, this may defeat the object of a degree-level education:

> *The key elements are stepping outside the organization, meeting a wide range of people and developing one's intellectual capacity. It defeats the purpose if officers take a degree together in a tailor-made programme or if the content is shaped to be overly functional for policing.*

Belur *et al*. (2019:81) show the effectiveness of problem-based learning and debriefing as well as interspersing courses with work-based placements, as beneficial in resolving the tensions between theory and practice, however they recommend timing this correctly:

> *To optimize the field training or placement, recruits should have enough understanding of the theory and context to be able to learn from observation and basic minimum exposure to operational practice, but at the same time not so early as to place them or others in any harm or danger.*

More recently, experiences of the developing partnerships between police forces and universities show how these collaborations can allow positive aspects of police culture to flourish (see Fenn *et al*., 2020; Macvean and Cox, 2012). Further, personal accounts (e.g. Heslop, 2011). Qualitative research (see Williams *et al*., 2019) has also shown that higher

education for police officers can be transformational. Learning about social and criminological theory has contributed to students' understanding of the role of policing in society, including their place within the organisation, and the processes behind police decision-making (Williams *et al*., 2019). This suggests that the experience of university should broaden the student's horizons, stimulate their curiosity and imagination, foster intellectual confidence, and create a capacity for self-directed learning as well as improve written and verbal communication:

> *I see the PEQF as an opportunity for the police to regain professional authority by developing a robust epistemic understanding of its role within society and a knowledgeable workforce that is able to respond to the changing societal demands in thoughtful, meaningful, and appropriate ways.* (Wood, 2020:375)

Challenges to the rollout of PEQF

The issue of delivering consistent training across police services has long been an obstacle for national police training bodies (Tong and Hallenberg, 2017). Tong and Hallenberg claim there has been wide ranging, variable, and inconsistent practice in terms of the implementation, assessment, and accreditation of initial police education. Indeed, consistency can be particularly problematic with 43 police services, each with different Police Crime Commissioners (PCC) and chief officers as well as discrete local problems requiring a variety of solutions and skills. Similarly, the higher education landscape is diverse, with research-intensive as well as more teaching-focused universities - some recruiting internationally, and others acting more as local education providers. Furthermore, cuts in policing have had an impact on the reduction of training resources within police services, including infrastructure and staff. In times of austerity, when operational demands are increasing in the context of less funding, training often becomes lower priority. Working with higher education providers to create a consistent national curriculum may present challenges to local knowledge and responding to local needs. Also, within set curriculums, it is more difficult to reflect changes in priorities and therefore higher education can be less agile. This includes, for example, changes in technology such as issues with drones, driverless cars, body worn cameras, artificial intelligence, big data etc (Tong and Hallenberg, 2017).

Current knowledge about the rollout of PEQF

It has been argued that university education can add to police flexibility, accountability, community orientation, and legitimacy (Paterson, 2011). To date, there is only one evaluation of the PEQF that has been published (College of Policing, 2020b), but other studies are ongoing. This evaluation found that the PEQF offers a unique opportunity for forces to support each other and commented on the importance of strategic decision making at force level through all stages of the implementation process. The evaluation also found that student officers reported a positive experience overall, gaining a deeper knowledge and understanding of social issues, as well as critical thinking, time management and writing skills. The College of Police underline the importance of the role of the tutor in supporting delivery of these programmes and the need for protected learning time and workforce planning concerns (College of Policing, 2020b).

Interviews from the College of Police's evaluation of the first cohort of PCDA recruits within 4 forces demonstrate the expectations of the PCDA - as creating an officer who can 'problem solve at the point of contact, who can understand vulnerability from a social context, not just the context of what they find in front of them. . . who can question things and demand more from our support services, such as IT, etc.' Further, interviewees acknowledge the changing nature of police work and the skill level at which police are working in comparison to other professions they come into contact with. Within this evaluation, interviewees described the PCDA as an opportunity to innovate and develop new initial learning for officers. The PCDA was viewed as an investment in the workforce, providing officers with deeper knowledge and critical thinking skills. Students were attracted to the diverse nature of the work and the support for a degree-level qualification. The evaluation also highlighted the following:

- Students were concerned about balancing their home life and police work with studying, including the extra requirements of re-taking GCSEs.
- Some students struggled with academic assignments and would have liked study skills and essay writing modules earlier in the course. Students also struggled with the type of things they were dealing with during police practice and felt that personal tutors helped with this.

- Students found that the communication between forces and universities about learning goals were not adequate.
- Students felt that their work-based assessment portfolio was dependent on the things they had been exposed to during their police work.
- Students felt a level of bitterness from others on the force who did not have degrees, these people felt somewhat devalued by the concept of professionalisation, as though they were not operating at a professional level previously.

The quest for autonomy

One of the fundamental requirements of a profession is the basis on which practitioners are allowed to exercise a high degree of individual autonomy and independence of judgement (College of Policing, 2020). This was evidenced in the early stages of programme development when the forces embraced the HE approach of developing students as 'independent and critical thinkers' and placed this in the context of 'improving policing practice and outcomes' (Leek, 2020:744). However, some research shows that decision making relies on rank, and use of policies and procedures can restrict autonomy (McCanney *et al*., 2021; Williams *et al*., 2019). Therefore, the combination of rank-based control of decision making and policies can restrain officer discretion and cause dissatisfaction that grows over length of service. Indeed some research shows that almost a third of those who voluntarily resigned from the force felt that they lacked a voice (Charman and Bennett, 2021). This indicates the importance of police culture on the process of implementing learning, with associated implications on officer wellbeing and integration.

Williams *et al*'s (2019) qualitative research with serving officers who have undertaken an academic qualification in policing found that participants were given little opportunity to voice or implement their knowledge:

> *the majority of the participants described an inability to utilise the knowledge gained from their degree due to a lack of peer support and a perception of irrelevance from more senior members of staff. There is a need here to understand what defines individual professionalism and how that relates to or conflicts with organisational professionalism and good policing.*

However, the participants demonstrated the value of their education in many ways, for example:

> *It's [the theory] that's given me a greater understanding and that's the big thing for me. It's given me an even bigger understanding of why I do what I do, what's gone on in the past, what's happened, why policing does what it does, and why we can look at reviewing it and doing it better. And I think the more reading into something you do, the more confidence you gain and the more knowledge you gain.* (Williams *et al*., 2019:270)

Stanko (2020) argues that the problems related to the perceived conflict between theory and practice can be overcome. This can be achieved by highlighting instances where police decision making has been both validated and challenged, and by exploring concepts of vulnerability:

> *Rapid changes in technologies, thinking about future crimes, and future protection is increasingly requiring both the academic and the police professional to work more closely together. Pressure from diminishing budgets as well as innovation in technology demands more creativity.* (Stanko, 2020:51)

Police Now

As part of the PEQF developments, Police Now, a Metropolitan Police initiative rolled out across England and Wales, was designed to recruit high quality graduates for a fast-tracked entry to policing, to work closely with communities in areas of high deprivation. This has resulted in the recruitment of more female and BAME candidates and promotes evidence-based policing and partnerships with community services. The latest evaluation report (Police Now, 2021) claims that officers' joining policing through Police Now's programmes have strong communication skills, high levels of emotional intelligence, a strong alignment to procedural justice, as well as a motivation to apply evidence-based policing techniques to community problem-solving. The goal of Police Now was to recruit diverse officers who will have a notable impact on local communities and are 'willing and able to constructively disrupt the status quo to deliver innovation on the policing frontline' (Police Now, 2021:4). Police

Now have found that this cohort of officers have increased job retention and positive trends in crime reduction in their forces (Police Now, 2021).

The London Mayor's office for Policing and Crime's (MOPAC) evaluation of the first cohort of Police Now participants in London included 67 recruits (Yesberg and Dawson, 2017). This found that almost half of participants in the cohort were female (45%) and 12% were from Black, Asian and Minority Ethnic (BAME) groups. This group joined the MPS in July 2015, completed a designated Summer Academy in August 2015, and from September 2015 were placed into community wards as Dedicated Ward Officers (DWOs). Of the 67 officers who were placed into wards, 55 graduated from the two-year programme. Participants were posted into the most disadvantaged communities across London, with the majority posted in wards within the top 20% of vulnerable localities.

After a few months on the job, the majority of respondents (73%) felt they had been accepted by colleagues in their borough and that they were treated with respect (71%). At the same time, however, 54% of respondents reported feeling a stigma attached to being part of the Police Now programme and 49% reported feeling uncomfortable disclosing being part of the programme when meeting new colleagues. The majority of officers reported that managers and superiors can have higher expectations of them and sometimes offer them more opportunities and responsibility than others. This data demonstrates the importance of monitoring officer wellbeing on a longer-term basis.

Fenn *et al*. (2020:143) provides a commentary of observations from the first months of the training, arguing that collaboration with academia was crucial to the success of the programme:

> The partnerships developed with academic researchers within a participatory framework played a crucial role in the development of the programme and the wider maturity of Police Now as an organization. In particular, the collaborative delivery of events and co-production of an academic paper helped build interpersonal relationships and guide innovation in police training and the development of a combined practice and education model for graduate officers.

Early indications show that with good communication between services and education, the PEQF system is benefitting police forces. As recommended by Stanko (2020:51-52) 'there is

much more work to be done, but the opportunities to understand craft and improve it have never been better. . .Collaboration requires openness and the willingness to challenge.'

Summary

This literature review demonstrates the many encouraging developments that have arisen from the professionalisation agenda, including the beneficial collaboration between forces and academia.

It is clear that practitioners are benefitting from evidence-based learning, despite raising some concerns about integration, autonomy, and being able to bridge the gap between theory and practice. The literature contains some important suggestions for resolving these issues, such as engaging practitioners as lecturers and researchers, who are able to provide lived examples of where decisions have been made using evidence-based practice (Belur *et al*., 2019; Belur *et al*., 2020). Some important insights about practitioner/academia partnerships can be gleaned from professions further along the professionalisation journey, such as social work (Baginsky *et al*., 2019; Interface Associates UK Ltd, 2020). These developments demonstrate the importance of evaluations that continue to investigate transformative suggestions for change in the longer-term.

Much of the research at this early stage has relied on attitudinal responses from officers, participating in in-house evaluations, indicating the need for independent, empirical work. Belur *et al*'s (2019:87) systematic review of police recruit training programmes indicates the lack of evaluations that explore training outcomes; they recommend research that asks 'what is working and how'. Therefore, there is a need for research that focuses on the application of learning, and how this relates to practitioner skills and confidence, as well as wellbeing. There is also a need for work that focusses on culture in forces, integration of new recruits and metrics of 'feeling valued'. Instances of good pedagogical practice and lessons learned should be documented in order to build on prior experience of forces during this period of transition.

Method

Study Design

The project concerned a secondary source design, examining survey data that had been collated by the Training Evaluation Office of Lancashire Constabulary. The data related to both Lancashire Constabulary and Cumbria Constabulary, with survey responses collected over three timepoints: end of week one; end of classroom phase, and, end of tutor phase. The focus of this report was solely on data pertaining to Lancashire Constabulary.

As the responses involved both quantitative and qualitative data, the study used a mixed methods approach to analyse the responses and provide insight.

Data Processing

Data was provided to the research team in .xlsx file format compatible with MS Excel. This concerned a collated dataset where the same/complimentary questions were aligned from survey responses across each of the three cohorts (IPLDP, PCDA and DHEP). Two files were provided, one relating to the responses from the three cohorts of Lancashire Constabulary and the other relating to the three cohorts of Cumbria Constabulary.

Each sheet within the file related to the timepoint questions and responses. Whilst some questions were specific to each timepoint, there were questions repeated across timepoints two and three. This allowed for a comparison of particular views across the three cohorts as they progressed from the end of classroom phase to the end of tutor phase.

In order to begin analysis, data that related to quantitative analysis was coded and imported into IBM SPSS (V.27) and stored as a .sav file. Text data for qualitative analysis was imported into NVivo 12+ for analysis.

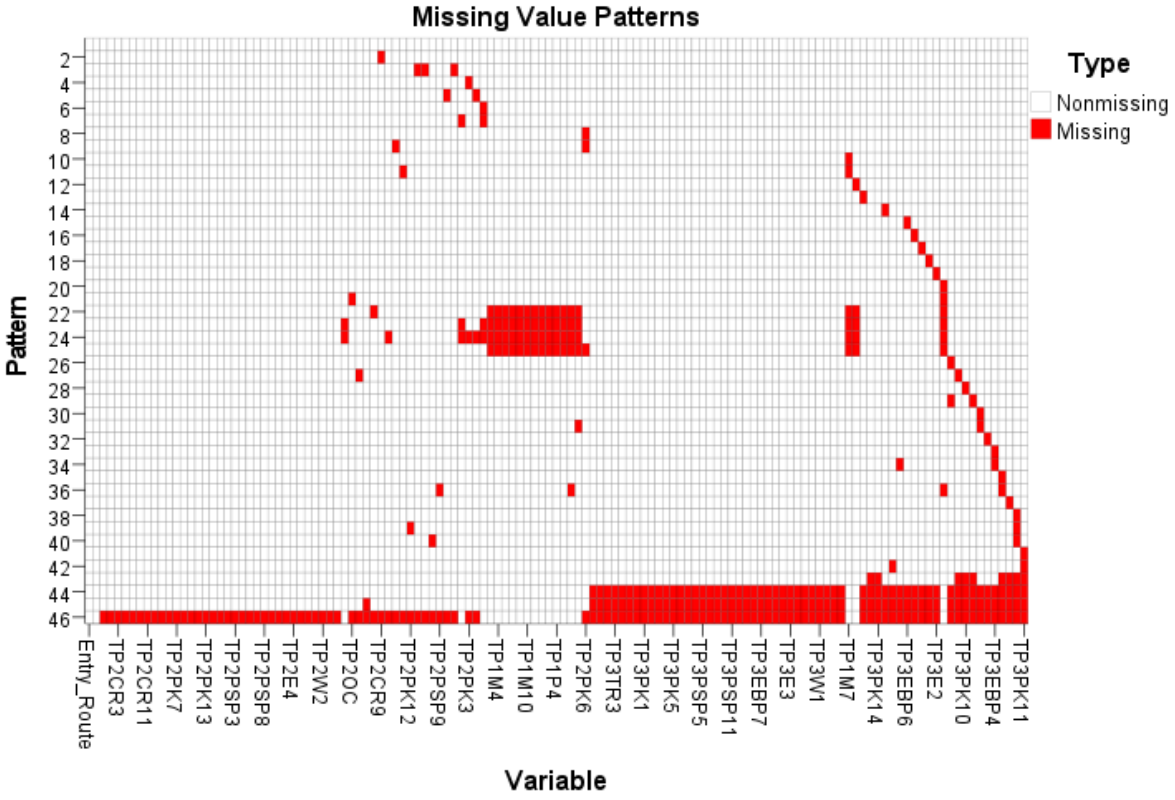
Analysis

The quantitative analysis focused on data that could be coded or was already coded as part of a Likert-type question. In total, there were 130 columns of quantitative data collected from the survey. This detailed the demographics/ID of the students (six columns), as well as their views across the various metrics (124 metrics).

Handling missing data

The first step in preparing the data for analysis was to diagnose and handle missing data. Whilst there is no objectively *good* way in handling missing data, the appropriateness of further action depends on whether it is diagnosed as Missing Completely At Random (MCAR), Missing At Random (MAR) or Missing Not At Random (MNAR). This process importantly assesses whether there is any pattern to the missing data which may cause bias, as opposed to being solely concerned about the amount missing (Tabachnick & Fidell, 2013). The patterns of missing data were plotted across the sample within SPSS, which identified a total of 46 patterns of data within the sample. From the visualisation of missing data (see Figure 1), Pattern 1 dominated the dataset and related to no missing data. Patterns 2-46 related to sporadic patterns of missing data, with patterns 44-46 highlighting the most missing data, but across very few cases. Examining each variable individually found that all variables had less than 5% data missing.

Figure 1: Missing data patterns across Lancashire Constabulary Cohorts



Furthermore, missing value analysis using Little's MCAR, the test produced a statistically nonsignificant finding (χ^2 (4980) = 4984.194, p = .481) meaning there was no underlying pattern to the missing data. This meant that the missing data could be considered as MCAR and that the data were robust to various methods of handling missing cases.

Overall, the above diagnostics meant that all subjects with missing data could have been subject to listwise or pairwise deletion without introducing bias into the analyses; however, due to the small sample size, each individual's attitude was of interest and so priority was placed on data retention.

In order to address the missing data, the research team initially used prior knowledge to explain the large amounts of case-wise missing data. Firstly, those who left the course were designated 'leavers' and provided data to TP1, but not to TP2 and/or TP3. Respondents with this pattern of missing data were subject to listwise deletion from the main data, with their data stored separately for a later supplementary analysis (n = 5). Those who did not provide data for TP1, but subsequently provided responses for TP2 and TP3 were respondents who had missed the initial survey deadline but had participated in later survey rounds. To ensure

inclusion within the study, the Training Evaluation Officer sought out the missing respondent demographics. The data in relation to their attitudes across TP1 were handled following the same procedure as all other missing data.

All other missing data was handled through median imputation. The procedure has distinct advantages over other methods such as deletion (which reduces sample size), however a major drawback of mean/median imputation is that it artificially deflates variable variance (Myers, 2011). Furthermore, the analysis of Likert-type data is often controversial as there is no academic agreement on whether the data is to be considered continuous or ordinal (Harpe, 2015), with arguments for and against both approaches (Norman, 2010). In this instance, the data were treated as ordinal, whereby missing values were replaced by median imputation when averaging all other cases within the variable.

This resulted in a completed dataset involving *n* = 139 students across the three cohorts, with 6 demographic/ID variables, and 124 attitude metrics.

Handling data volume

The second step in processing the data was handling the volume of data. Whilst dimension reduction through Principal Components Analysis or similar may have been possible, the researchers instead adopted a theoretically driven approach. Many of these metrics involved a large number of Likert-type questions that could be processed as a Likert scale. As such, the columns of data relating to these questions were considered as 'sub-items' and were summed into a total metric for inferential statistical analysis. For example, in timepoint two – end of classroom phase, the following question was asked of respondents: "Please consider the following area and record how confident you feel at the moment in relation to them: 1 = not confident in the area at all, to 10 = fully confident in this area". The survey then proceeded to collect data on 16 individual topic areas of policing knowledge. In this instance, the study formed a 'Total Confidence in Policing Knowledge' score, involving the summing of the 16 items. The reliability of the totalled metric was examined through Cronbach's alpha, which examined the internal consistency of the sub-items when combined into a total metric.

Analysis of quantitative metrics

The analysis first conducts a detailed descriptive analysis for the demographics and each of the sub-items across the timepoints. This involved exploratory descriptive statistics and data visualisation to gain an impression of the attitudes across the cohorts. This was followed by the totalling of sub-metrics, whereby the total metrics were statistically modelled through logistic regression. The logistic regression examined three target variables (entry route, academic qualifications, and previous police experience) in understanding the differences in attitudes across the sample. Caution is advised in the interpretation of the exponentials and parameter estimates within this statistical modelling due to the use of median imputation as the procedure of handling missing data. This is because error will not have been appropriately imputed within the data, likely resulting in the introduction of bias to the parameter estimates (Zhang, 2016).

Analysis of qualitative responses

Qualitative analysis concerned a thematic examination of each open-ended questions across each timepoint. The thematic analysis followed the principles established by (Braun & Clarke, 2006) and was conducted through NVivo 12+.

To determine the consistency of the themes established within the analysis, Fleiss Kappa was used to test the inter-rater reliability between three raters (Nichols *et al.,* 2010). Due to the large volume of open-ended questions at each timepoint, three questions were selected at random (one from each timepoint). The raters independently applied the themes generated for these questions back to the raw data to determine the overall level agreement, whilst controlling for random chance. The output can range from -1 through to +1, where minus scores indicate agreement worse than random chance and positive scores indicating greater than random chance. Interpretation of the output can be understood by applying the thresholds established by Landis and Koch (1977):

Table 1: Kappa statistic interpretations

Kappa statistic	Interpretation
1.00 - 0.81	Almost perfect agreement
0.80 – 0.61	Substantial agreement
0.60 – 0.41	Moderate agreement
0.40 – 0.21	Fair agreement
0.20 – 0.00	Slight agreement
< 0.00	No agreement

The inter-rater analysis conducted on the questions is illustrated in Table 2 below. The analysis illustrated how there was substantial agreement in the themes generated for TP2 and TP3, but a fair level of agreement across the three raters in TP1.

Table 2: Inter-rater reliability analysis of themes from randomly selected questions across each timepoint

Questions	Number of themes	Kappa statistic	Interpretation
TP1: Concerns or worries	6	.381 (95% CI: .342 - .420)	Fair agreement
TP2: Anything to make you feel more confident	5	.799 (95% CI: .756 - .841)	Substantial agreement
TP3: Anything extra that should have been included in training	6	.621 (95% CI: .582 - .661)	Substantial agreement

From an examination of the individual themes, there were a few minor disagreements in coding across some themes (such as managing or balancing workload and/or other commitments including picking up children, and (lacking) confidence being coded when the participant mentioned nervousness on their first day). However, most disagreements appeared to be in the coding of 'other', whereby the raters each coded themes they identified based upon their personal interpretation of the text box. This included the coding when

annual leave was mentioned, with other raters coding this under 'lack of ability to plan', as well as when a lack of police experience was coded as other with other raters coding this as (lacking) confidence. Overall, it was apparent that this disagreement related to the raters' interpretation of individual items mentioned by the students, but in relation to topics that could have appeared in other themes, or did not appear frequently enough to be considered parent/child themes. Whilst best practice from this point would have been to reconcile any disagreements in coding to create an agreed thematic analysis, time constraints on the project meant that the coding from the primary rater was used for reporting purposes.

Ethics

As the project was brought under the workstream of the EBP secondment, permission was sought and granted by Lancashire Constabulary's Head of Corporate Development. The work also required ethical approval from the UCLan ethics committee as the project involved data relating to students enrolled on UCLan courses. Ethical approval was sought and granted on 15th April 2021 by the Business, Arts, Humanities and Social Science (BAHSS) ethics committee (see Appendix A).

Analysis of Lancashire Constabulary Entry Routes

The survey data relating to Lancashire Constabulary consisted of returned surveys across the IPLDP, PCDA and DHEP cohorts. The following chapter provides a detailed explanation of the missing data diagnostics, mixed methods analysis of the survey questions, and the building of statistical models to compare the PCDA and DHEP cohorts to the IPLDP comparator. The analysis and reporting of results has been completed for each timepoint separately.

Cohort Demographics

IPLDP

There were 18 IPLDP students surveyed within the Lancashire data, of which 12 were male (66.7%) and 6 were female (33.3%).

When examining their previous policing experience, 9 students (50.0%) had neither been a Special or a PCSO. There were 4 students (22.2%) who had been a Special only, 3 (16.7%) who had previously been a PCSO only, and 2 (11.1%) who has been both a PCSO and a Special previously.

Across the sample, half of the IPLDP cohort (*n* = 9, 50.0%) had a level six qualification, with the remaining majority either having level two (*n* = 3, 16.7%) or three (*n* = 4, 22.2%) qualifications (see Table 3 below).

Table 3: Qualification breakdown across the IPLDP cohort

Qualification	Frequency (*n*)	Percent (%)
Level 2 (GCSE's)	3	16.7
Level 3 (A Levels)	4	22.2
Level 4 (Certificate of HE)	1	5.6
Level 5 (Foundation Degree)	1	5.6
Level 6 (UG Degree)	9	50.0
Total	**18**	**100.0**

PCDA

The first PEQF cohort, related to a total of 35 surveyed PCDA students. Of this sample, there were 21 males (60.0%) and 14 females (40.0%).

The majority of the PCDA students had neither been a PCSO or Special previously (*n* = 23, 65.7%), with 6 students (17.1%) previously being a PCSO only, and 6 students (17.1%) previously being a Special only. None of the cohort had been both a Special and PCSO.

Nearly all of the PCDA cohort had either level three (*n* = 22, 62.9%) or level four (*n* = 10, 28.6%) qualifications (see Table 4).

Table 4: Qualification breakdown across the PCDA cohort

Qualification	Frequency (*n*)	Percent (%)
Level 3 (A Levels)	22	62.9
Level 4 (Certificate of HE)	10	28.6
Level 5 (Foundation Degree)	3	8.6
Total	**35**	**100.0**

DHEP

A total 86 Lancs DHEP students were surveyed and included within the analysis. Of this cohort, 50 were male (58.1%) and 36 were female (41.9%).

A large majority of the DHEP cohort had neither been a Special or a PCSO (*n* = 60, 69.8%). There were 12 students (14.0%) who had previously been a PCSO only, 9 (10.5%) who had been a Special only, and 5 (5.8%) who had previously been both a PCSO and Special.

As expected, the DHEP cohort were entirely made up of level six (*n* = 70, 81.4%) and level seven (*n* = 16, 18.6%) qualifications.

Timepoint One – End of Week One

Timepoint one (TP1) concerned the collection of two sets of quantitative metrics and data from three qualitative questions. The two metrics were interpreted to relate to: 1) *Motivations* for joining the police; and, 2) *Preparedness* for the upcoming course. The qualitative questions asked the students: if they had any concerns or worries; suggestions for anything that could have been done differently in the first week; and, did they have any other comments in relation to their first week.

TP1 - Motivations for joining the police

The first metric in TP1 measured the students' motivations for wanting to join the police and was measured on a five-point Likert-type scale. The questions asked: *"How influential were each of the following factors in your decision to apply to join the police force?*" and required the students to answer between 1 = not influential through to 5 = extremely influential. This was asked across ten individual items (outlined in Table 5).

Table 5: Survey questions concerning motivation for joining the police

Survey Questions for TP1 - Motivation	**Question Label**
The opportunity to help people in the community	Q1
The excitement of the work	Q2
Salary prospects	Q3
An opportunity to earn while learning	Q4
Opportunities for career advancement	Q5
Support from my family	Q6
Intellectual curiosity / a desire to learn	Q7
Status of the job	Q8
Lack of other career alternatives	Q9
Knowing friends or family who are police officers	Q10

To visualise that data across all ten metrics, the means and standard deviations across the three cohorts were plotted onto a graph to represent the average responses across each cohort. Figure 2 illustrates the plotted data, whereby the lines represent the mean average scores across the three groups and the bars underneath represent the standard deviation of the mean. This allowed for a visual comparison of the average attitudes, whilst also considering the variance in responses across the mean scores. The graph illustrates how there was a consistent trend in mean scores (*M*) for motivations across all three cohorts, with only minor differences occurring in question four, nine and ten. Furthermore, examining the standard deviations (*SD*) illustrated how the grouping of scores was more consistent to questions one, two and five, but were much more spread out in response to other questions.

Figure 2: Motivations for joining the police across the IPLDP, PCDA and DHEP cohorts

Questions one (opportunity to help people in the community), two (excitement of the work) and five (career advancement) scored highly across all three cohorts, with mean scores clustering around 4.5 (very-extremely influential). Overall, the metrics illustrate how the students joined the police due to the excitement of the work, to advance their careers and to help people in their communities. This was closely followed by family support and status of the job, suggesting it was a role that was externally validated by people they knew. Salary, opportunity for learning and intellectual curiosity had less of an influence on the students'

motivations to join the police. Whilst there was a slight trend in PCDAs and DHEPs reporting higher influences in relation to opportunities to learn while working, this was uncertain due to the spread in scores (SDs) across the cohorts. The least influential factors were lack of career alternatives and knowing other police officers. The former may have been linked to educational qualifications, with IPLDPs reporting it as a higher influence in their decision to join. The latter, however, was likely lower and had higher spread in scores due to the binary nature of the variable, whereby the students across all cohorts either know other officers or did not, thus providing a wider spread of scores in comparison to all other motivation variables.

TP1 - Preparedness for the course

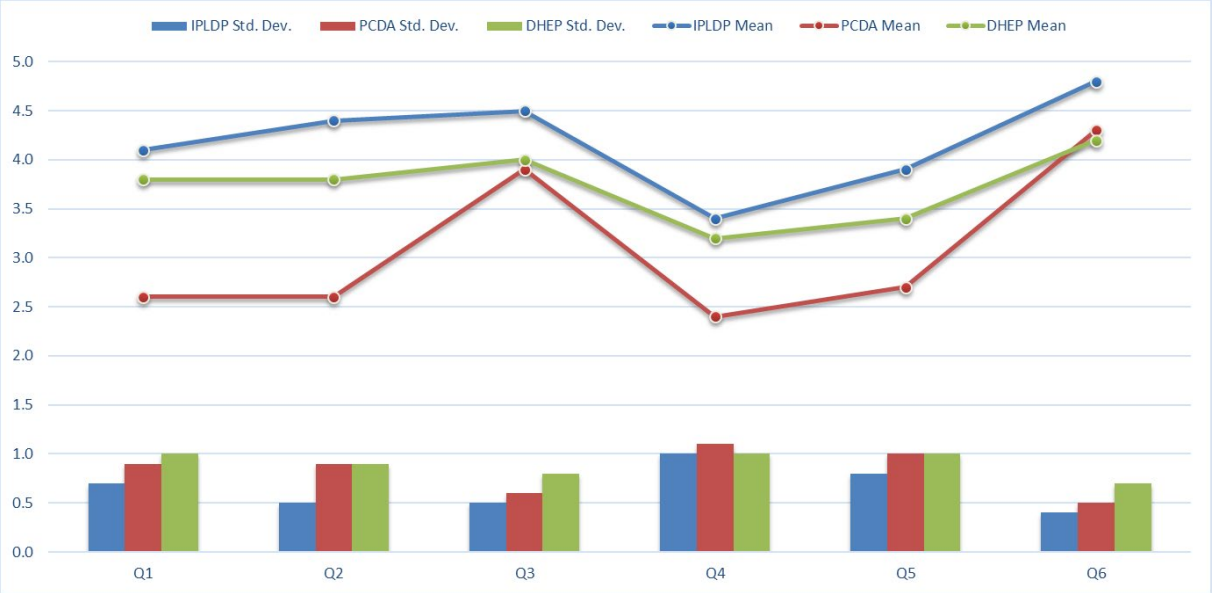
The following section used a five-point Likert-type agreement scale (1 = strongly disagree through to, 5 = strongly agree) to answer questions in relation to their upcoming course. They were simply asked to report their agreement to the following questions outlined in Table 6 below.

Table 6: Survey questions concerning preparedness for upcoming course

Survey Question for TP1 - Preparedness	Question Label
I am fully aware of the timetabling of the classroom section of this course	Q1
I am fully aware of the structure of the IPLDP programme after the classroom section – tutor phase, probation etc.	Q2
I know what is expected of me in relation to this training	Q3
I am not concerned with the volume of work involved	Q4
I have no immediate concerns or worries	Q5
I know who to approach with concerns or worries	Q6

The same procedure was used to plot the means and standard deviations across the six questions of preparedness.

Figure 3: Preparedness for upcoming course across the IPLDP, PCDA and DHEP cohorts



As seen in Figure 3, there were generally higher average scores in preparedness across the IPLDP and DHEP cohorts, with the PCDA reporting lower levels of preparedness in relation to Questions one, two, four and five.

In relation to questions one (timetabling of classrooms) and two (structure of course), both the IPLDP and DHEP cohorts reported close to 4.0-4.5 (agree) for both items. The PCDA cohort fell around 2.5 (between disagree and neither), indicating potential issues in their preparation in relation to the timetabling and structure of their course.

A similar trend was apparent with questions four (concerned about volume of work) and five (no immediate concerns or worries), whereby the PCDA cohort continued to score around 2.5 (between disagree and neither). However, the IPLDP and DHEP cohorts also reported lower levels (between 3 = neither, and 4 = agree), indicating that there were some worries around workload and some concerns across all three cohorts. This was, however, most prominent within the PCDA cohort.

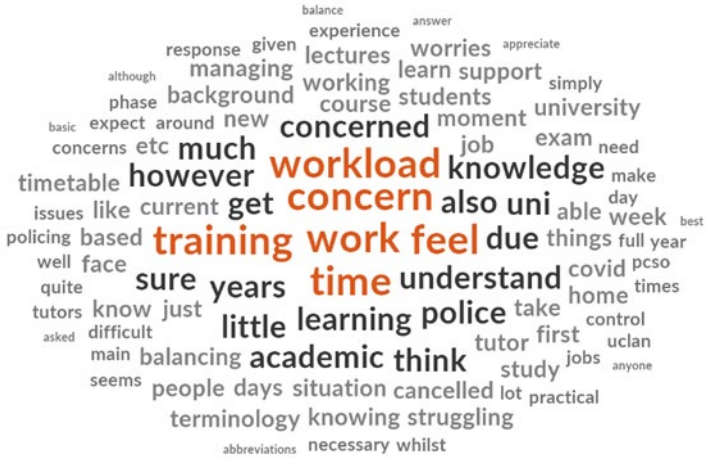
Questions three (know what is expected of me) and six (know who to approach with concerns or worries) both provided metrics where the cohorts aligned and presented smaller SDs. This indicated that across all three groups agreed-strongly agreed that they know what was expected of them as a student and who to approach with their concerns.

Overall, the metrics indicated that the roles of both students and staff were well established across all courses, that timetabling and structure had some issues within the PCDA, and that all cohorts reported some concerns over workload but that this was most prominent within the PCDA cohort.

TP1 – Free text responses

Concerns or worries?

Figure 4: Word Cloud of student responses to concerns or worries during week one.



When understanding the concerns/worries across the three cohorts, the main theme interpreted from the data related to balancing or coping with workload (*n* = 21). The theme involved students explaining that it was difficult to balance both academic and practical work to a high standard, against other key responsibilities such as childcare, as well as the Force requiring them to work on their Rest Days affecting their ability to hand in assignments on time.

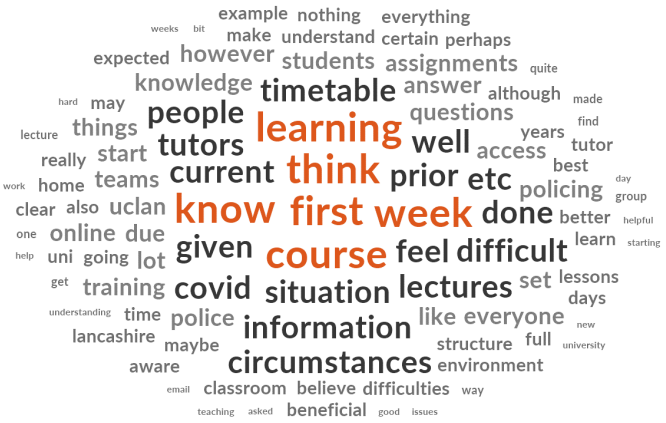
A second important theme was the students' lack of ability to plan (*n* = 11). This related to both the scheduling and communication of timetables and/or classes. The poor communication in relation to timetables and placement location, or last-minute changes, reportedly interfered with assignment planning and family time for the students.

Coping with online learning was raised as an issue within the DHEP cohort (*n* = 7), but with the sensitivity that it was a consequence of the pandemic. The theme included students

stating that they struggled without the face-to-face interaction of teaching and the social aspects of the learning/peer support. In addition, they also mentioned technical issues with the online platforms used for teaching and learning. Another issue that was mentioned mostly by DHEPs (*n* = 11), but also some PCDAs (*n* = -[1]), was a lack of confidence. This mainly related to the beginning of academic study again; however, there were some examples were the students expressed that the delivery of content could have been more sensitive to the fact that the students had no prior knowledge, with questioning in front of the full cohort making them feel uncomfortable or possibly stupid.

Anything done differently during the first week?

Figure 5: Word Cloud of student responses to anything that could be done differently during week one.



When examining what could be done differently in future, the DHEP cohort recommended changing the order of the starting lectures as some sessions required too much prior knowledge (*n* = 30). The theme appeared important for student satisfaction, as some mentioned how asking questions of the cohort before any learning had taken place was unproductive and introduced anxiety to the learning environment. The theme also involved more general comments about course delivery, including more one-to-one sessions and more peer-based sessions so that the students could get to know each other. All cohorts requested more detail of the overall course and timetable at the beginning (*n* = 38). In addition, IPLDPs

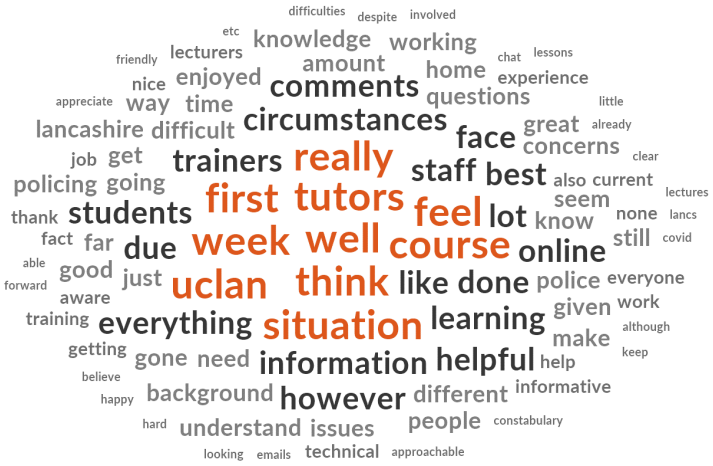
[1] Figure suppressed as *n* < 5. This is to ensure anonymity of participants' views in accordance with 'safe researcher' practice and in compliance with UCLan ethical approval.

reported that they would have benefited from earlier access to IT systems or e-learning packages (*n* = 9).

Overall, however, it is important to note that the themes highlighted were in amongst a large proportion of students across all cohorts who reported positive things about their enjoyment of the course and the support they felt was available as they began their study (*n* = 31).

Any other Comments?

Figure 6: Word Cloud of student responses to any other comment during week one.



One of the main themes across all three cohorts, was how the tutors were informative, knowledgeable, or adapted well to teaching during the pandemic (*n* = 25). There were also several comments that were generally positive in amongst other information (*n* = 30).

Several DHEPs also explained how they had issues with adapting to an online only learning environment (*n* = 25). Students explained that it was difficult to take in the information and contextualise it when they could not discuss material informally (through natural interactions) with colleagues, trainers and lecturers.

Timepoint Two – End of Classroom Phase

The second round of surveys (timepoint 2 (TP2)) collected metrics on six quantitative metrics: 1) overall confidence to apply learning to practice; 2) classroom phase review; 3) confidence in policing knowledge; 4) confidence in police skills and procedures; 5) student engagement; and 6) student wellbeing. This was in addition to five qualitative questions which collected responses to questions including: what would make you feel more confident; can you suggest anything that would make you feel more confident in these areas (in relation to police knowledge, skills and procedures); is there anything extra you feel should have been included in your training; can you suggest anything that could have been done differently during your classroom training; and, do you have any additional comments to make about this training?

TP2 - Overall confidence and increasing student confidence

Following the question: "Please rate your overall confidence in your ability to put your learning into practice under the guidance of the tutor", students rated their overall confidence on a five-point Likert-type scale, with the anchors: 1 = not confident; 2 = partially confident; 3 = fairly confident; 4 = mostly confident; and, 5 = fully confident. Means and standard deviations were plotted to contrast average scores across the three cohorts. There appeared to be a slight difference in the confidence, whereby IPLDP students were slightly more confident (M = 3.9, SD = 0.7), in comparison to the PCDA and DHEP cohorts who scored almost identically (M = 3.5, SD = 0.8 respectively). However, on the whole, it appeared that there were similar levels of confidence in applying learning to practice under the guidance of their respective tutors across all three cohorts.

Examining the free text responses to what could increase levels of confidence across the cohorts, the overwhelming majority of students stated that more roleplays or operational practice/experience would have increased their levels of confidence (n = 106). Included within the theme were comments relating to practical experience in specific topics (such as interviews, searches, and arrests etc), but also broader comments about just gaining practical experience in general. Specific to the academic courses, the PCDA (n = -[2]) and DHEP (n = 7) cohorts reported that changes to online teaching would have aided in their understanding

[2] Figure suppressed as $n < 5$.

and confidence. Some reported broad statements, such as that online teaching was a hindrance, but others reported more specific feedback, such as that PowerPoint slides were not engaging or that the sessions were rushed. In addition, the PCDA (*n* = -[3]) and DHEP students (*n* = 7) reported that revisiting topics, such as key concepts or legislation, would have helped embed their learning and increase confidence. As such, future teaching may consider hosting additional tutorial sessions for students wishing to attend and revise particular subject areas to increase levels of confidence academic theory/law.

TP2 - Classroom Phase Review

The survey in TP2 included a section that reviewed the classroom phase that the students had just undertaken. Responses were collected on standard five-point Likert-type agreement scale (1 = strongly disagree; 5 = strongly agree) across 12 individual items outlined in Table 7 (please see next page).

[3] Figure supressed as *n* < 5.

Table 7: Survey questions concerning classroom phase review

Survey Question for TP2 – Classroom Phase Review	Question Label
I believe that communications during the classroom phase have been appropriate and informative	Q1
I am fully aware of the structure of the IPLDP/PCDA/DHEP programme after the classroom section – tutor phase, probation etc.	Q2
I know what is expected of me in relation to the tutor phase	Q3
I was informed timeously which Division I was allocated to	Q4
I am fully aware how to complete the IPS/PACs	Q5
I am not concerned with the volume of work involved	Q6
I have no immediate concerns or worries	Q7
I know who to approach with concerns or worries	Q8
I found the style of training delivery to be a good way of learning	Q9
Lectures are a good way of learning	Q10
E-learning is an appropriate way of learning	Q11
Scenarios are a good way of learning	Q12

The data was again mapped in terms of means and standard deviations across the 12 items to understand the dynamics across the three cohorts in relation to their review of the classroom phase (see Figure 7). This found that there were only very slight differences in relation to questions one (appropriate and informative communications), two (understand structure of programme), three (know what is expected of me) and seven (concerns and worries). The questions generally received an average score between 3.5 and 4.5 indicating that the students generally agreed with these statements.

Figure 7: Classroom phase review across the IPLDP, PCDA and DHEP cohorts

Scores began to differ in relation to questions four (timeously informed about Division allocation) and five (completing IPS/PACs), whereby the PCDA and DHEP cohorts began to provide lower levels of agreement to the questions in comparison to IPLDPs. With regards to division allocation, the IPLDP (*M* = 3.8, *SD* = 1.3) and PCDA (*M* = 3.7, *SD* = 1.2) cohorts generally agreed that this was done timeously; however, DHEPs reported lower levels of agreements (*M* = 3.2, *SD* = 1.2) indicating scores closer to a neutral viewpoint. However, the averages had high *SD*s indicating a larger spread in scores in comparison to the other questions, suggesting that the students in each cohort either had issues with division allocation or did not have issues.

Questions six (not concerned about volume of work) and eight (know who to approach with concerns) both had a close clustering of scores, although PCDA and IPLDPs had an inverse relationship. This seemed to suggest that the PCDAs were most concerned with workload, but also felt they knew who to approach with any concerns of worries. Conversely, IPLDPs were less concerned by workload but did not feel as confident in who to approach about concerns of worries. However, it is important to note that this was within the context of all three cohorts stating they agreed-strongly agreed that they knew who to approach with their concerns or worries.

Questions nine to twelve related to different forms of learning and presented interesting results. With regards to questions nine (style of training was a good way of learning), the IPLPD cohort reported that they 'agreed' with this statement, whereas PCDA reported neutral and DHEPs falling between the two in in terms of agreement. It is important to note the greater SD levels again, illustrating a larger range in scores across PCDA and DHEP, in comparison to the more consistent scores in IPLDPs.

With regards to the more general questions about different learning formats, all three cohorts provided the same pattern of data, with lectures (Q10) receiving scores between 3.0-4.0 (neutral-agree), e-learning (Q11) receiving scores between 2.5-3.0 (neutral), and scenarios (Q12) receiving scored between 4.5-5.0 (strongly agree). The scores indicated that all three cohorts much preferred the scenario style learning, whereby the low SDs also indicated that there was consistency across these high scores.

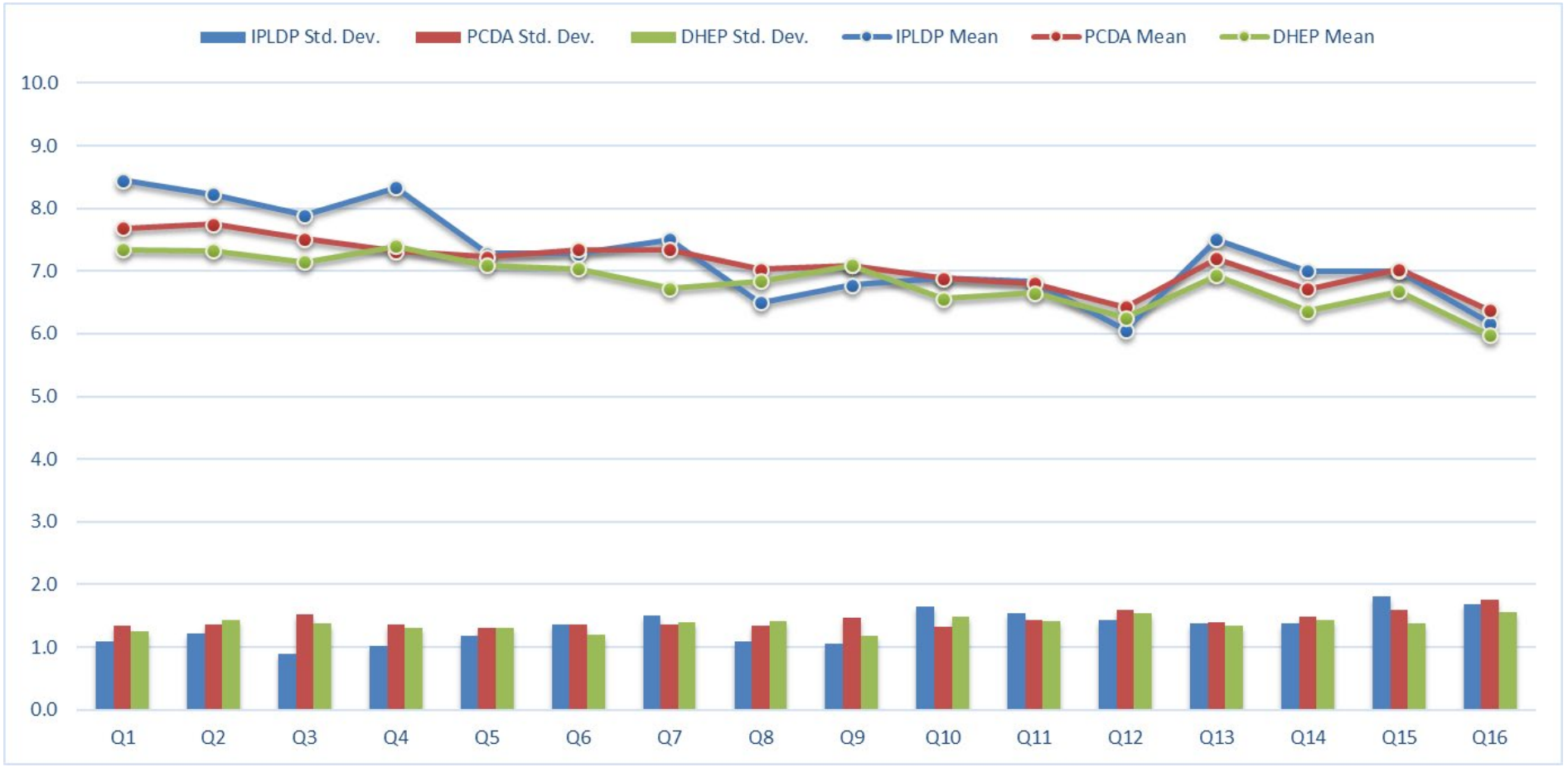
TP2 - Confidence in policing knowledge

The students were also asked to rate their confidence across a range of different areas of police knowledge. Responses were collected on a 10-point Likert-type question (1 = not confident through to 10 = fully confident). Table 8 outlines the specific areas of knowledge rated by the students.

Table 8: Survey questions concerning confidence in policing knowledge

Survey Question for TP2 – Police knowledge	**Question label**
Powers of arrest	Q1
Powers of entry	Q2
Powers to stop and search people, vehicles, premises	Q3
Theft Act – Theft, burglary, robbery, handling, vehicle crime, fraud, abstract electricity	Q4
Assaults	Q5
Criminal damage offences	Q6
Offensive weapons, bladed articles, going equipped	Q7
Harassment, Anti-Social Behaviour, Hate crime	Q8
Public order, drunkenness, liquor licensing	Q9
Drug legislation,	Q10
RTCs, drink/drug driving	Q11
Traffic legislation – Driving docs., con. & use, lighting,	Q12
Domestic abuse	Q13
Sexual offences	Q14
Child protection	Q15
Firearms	Q16

Figure 8: Confidence in police knowledge across the IPLDP, PCDA and DHEP cohorts



The plotting of means and standard deviations across the 16 areas of police knowledge illustrated how all three cohorts felt as confident, between 6.0 and 8.5, for all areas of police knowledge. The only slight difference between the three groups was that the IPLDP cohort report slightly higher levels of confidence in relation to the Theft Act (Q4), in comparison to both the PCDA and DHEP.

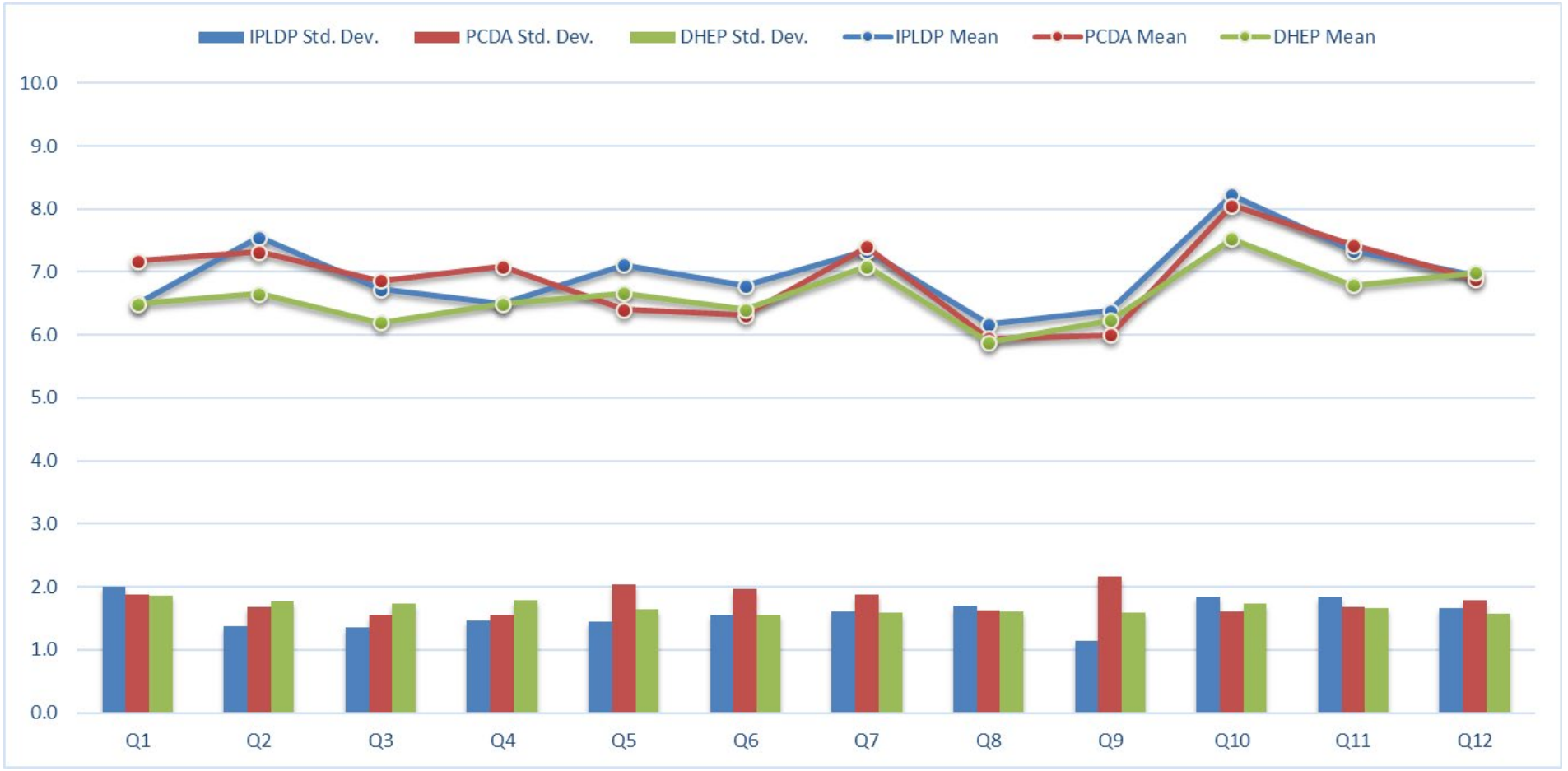
TP2 - Confidence in police skills and procedures

The same 10-point Likert-type confidence scale was used across 12 questions relating to police skills and procedures (see Table 9 for questions and labels and Figure 9 for plot of means and standard deviation).

Table 9: Survey questions concerning confidence in police skills and procedures

Survey Question for TP2 – Police skills and procedures	Question label
Use of constabulary computer programs/systems	Q1
Conducting searches of people, vehicles, property	Q2
Initial management and investigation of a crime	Q3
Dealing with missing persons/sudden death	Q4
Interviewing witnesses	Q5
Interviewing suspects	Q6
Arresting suspects/custody procedure (including PST)	Q7
Other disposals – Reporting suspects/PND/Fixed penalty/VDRS	Q8
Dealing with RTC	Q9
Completing checks on persons/vehicles – submitting intelligence	Q10
Dealing with property Lost/found/exhibits/prisoners	Q11
Mental Health – dealing with vulnerable, place of safety	Q12

Figure 9: Confidence in police skills and procedures across the IPLDP, PCDA and DHEP cohorts



Similar to police knowledge, the confidence scores relating to police skills and procedures were consistent across all three cohorts. Of note were the changes to the *SD*s across the 12 questions. Those that fell closer to *SD* = 2, illustrated measurements with a greater spread of scoring, meaning there was less consistency in confidence *within* the cohort. For example, in Q1 (use of constabulary computer systems) provided the highest *SD*s across all three cohorts, suggesting that students were split in all three cohorts (perhaps due to previous experience on the computer systems as PCSO/Special, in comparison to those with no previous experience). In addition, Q9 (dealing with an RTC) had a high *SD* amongst the PCDA cohort, but not IPLDP and DHEP. This suggested that, whilst average between the groups was the same, the PCDA cohort had students that were split in their confidence towards RTCs.

TP2 - Student engagement

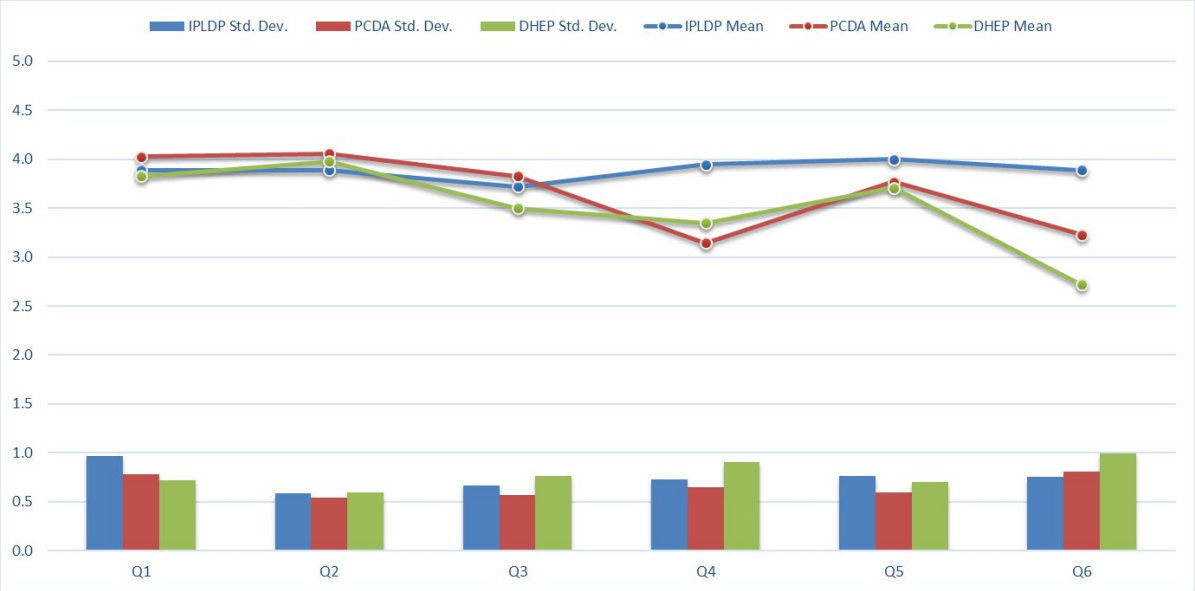
All three cohorts were asked to rate how true the following statements were about themselves: "I've been able to make up my mind about things"; "I've been dealing with problems well"; "I've been feeling useful"; "I've been feeling relaxed"; and, "I've been feeling close to other people". These were rated on a five-point Likert-type scale, with the anchors: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always. These ratings were interpreted as relating to student engagement, with the means and standard deviations plotted for interpretation (see Figure 10 on next page).

The Figure illustrates how all cohorts reported similar levels of engagement, with slight differences occurring in questions four (I've been feeling relaxed) and six (I've been feeling close to other people). In relation to question four, the PCDA and DHEP cohorts reported feeling less relaxed in comparison to the IPLDP cohort, implying that the academic courses were potentially more stressful in comparison to IPLDP training. In addition, there was also a spread over question six; however, the reported lower levels in relation to PCDA and DHEP could be due to the remote working imposed by Covid-19 restrictions.

To apply context to the slight differences, the comments section was examined; However, there were only two comments present. The first related to a respondent who stated that the question into dealing with problems was unclear. The second confirmed the explanation

around remote working, since one student stated that their (low) score in relation to 'feeling close other people' was because "training was mostly online".

Figure 10: Student engagement across the IPLDP, PCDA and DHEP cohorts

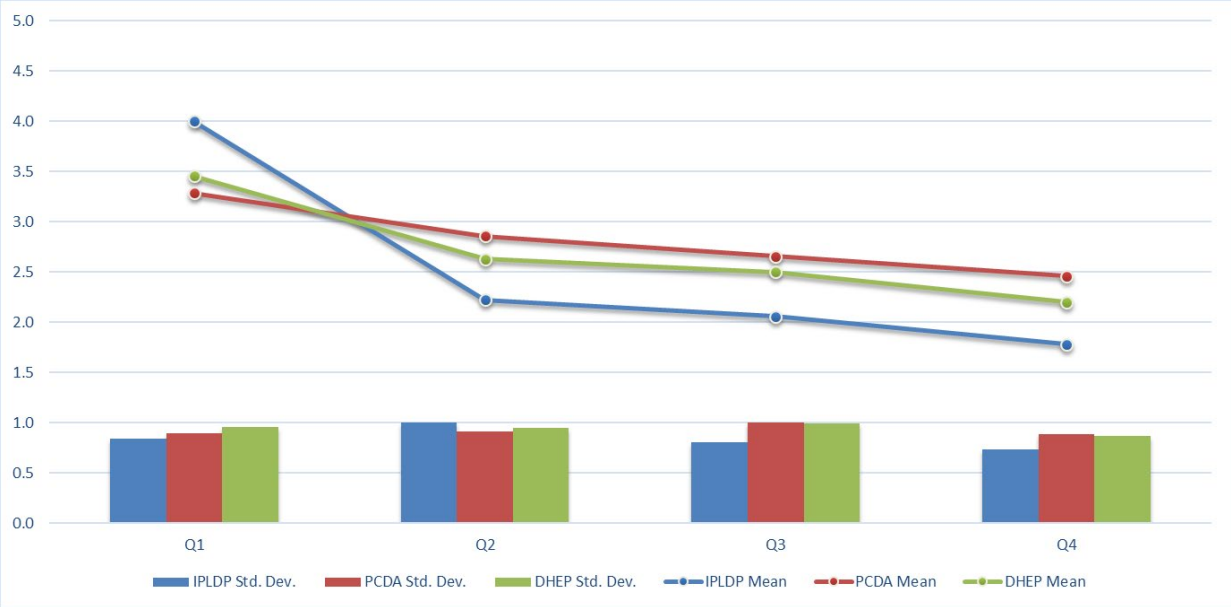


TP2 - Student wellbeing

Four further questions (using the same scale) were asked about the students wellbeing, including: "I have sufficient time and energy to engage in activities outside of work"; "My work leaves me with little energy to do any other non-work activity"; "Tension and stress from work often adversely affects the rest of my life"; and, "Due to work strain, I ignore my personal life needs". After plotting the mean scores and standard deviations (Figure 11), it was possible to visualise that all three cohorts followed a similar trend in responses. However, the IPLDP cohort had an inverse relationship to both PCDA and DHEP, whereby the students reported higher scores around the positively worded question one, and then lower scores around the negatively worded questions two, three and four. This suggested that the PCDA and DHEP cohorts were more moderate in their views on wellbeing with 'sometimes' scores around the positively worded "I have sufficient time and energy to engage in activities outside of work", with 'sometimes' to 'rarely' in relation to the other negatively worded wellbeing questions. The IPLDP cohort scored closer to 'often' in relation to having sufficient time and energy to engage in activities outside of work, and also fell consistently closer to 'rarely' in

relation to the other negatively worded wellbeing questions. This suggested that the IPLDP cohort may have had high levels of wellbeing in comparison to PCDAs and DHEPs.

Figure 11: Student wellbeing across the IPLDP, PCDA and DHEP cohorts



TP2 – Free text responses

Anything extra in training?

Following on from previous thematic findings, the main topic raised in additional training was more roleplay practice or operational experience across all three cohorts (*n* = 34).

DHEPs (*n* = 6) and IPLDPs (*n* = -[4]) both reported that they thought that additional training on IT systems, especially CONNECT, would have been useful. A small number of IPLDP students specifically (*n* = -[5]) expressed how a visit to court would have improved their understanding of cases following on from the police disposal.

Anything done differently?

Suggestions of things to do differently in future involved students from all three cohorts (*n* = 29) requesting an adaption to the course and assessment structure so that

[4] Figure supressed as *n* < 5.
[5] Figure supressed as *n* < 5.

assessments/exams were not arranged so closely to each other, and that the cohort had more protected learning days. This was argued to impact upon performance, as the degradation of their protected learning days meant that they had less time to prepare for assignments and this caused them difficulty in finding personal time.

Less online teaching appeared again as a theme (*n* = 23) across the DHEP and PCDA cohorts. This was also followed by repeated calls for more roleplay/practical experience from DHEPs and IPLDPs (*n* = 19).

There were also comments relating to adapting delivery to make the sessions more receptive to different learning types (*n* = 6). DHEPs and IPLDPs also stated that input from UCLan could have been better and raised concerns about the need for better communication between UCLan and Lancashire trainers to join up the course (*n* = 18).

Any other comments?

The themes within general comments again related to general positive comments stating that the courses were good, or the best they could be given the circumstances (*n* = 41). In addition to the general comments were positive statements across all cohorts about the tutors/trainers (*n* = 22). Specifically, these comments explained that the staff/speakers were knowledgeable, approachable, and able to provide effective pastoral care.

In addition to the comments above, DHEP's also stated that they wanted less/improved online learning (*n* = 10), and improvements to teaching styles or structures (*n* = 8).

TP2: Exam Results

Exams for all three cohorts were conducted throughout timepoint two. For the IPLDP cohort, this consisted of two exams. The first was a 60 mark exam completed on week 11, and the second was a 100 mark exam completed on week 18. The PCDA and DHEP courses has multiple exams broken down across the two teaching blocks. There were four exams in the first teaching block with varying marks depending on the cohort, and 3 exams in the second teaching block all concerning 25 marks. The Table below outlines the exams, number of students who sat them and subsequent group averages.

Table 10: All exams and median average marks across the three courses

Exam Reference	No. of Students	Available Marks	Median percent of marks attained	Inter-Quartile Range of Median
IPLDP_Exam1	18.0	60.0	**78.3**	10.8
IPLDP_Exam2	18.0	100.0	**72.5**	8.3
PCDA_Exam1.1	35.0	26.0	**73.1**	11.5
PCDA_Exam1.2	35.0	25.0	**72.0**	14.0
PCDA_Exam1.3	35.0	21.0	**61.9**	14.3
PCDA_Exam1.4	35.0	12.0	**83.3**	8.3
PCDA_Exam2.1	35.0	25.0	**84.0**	8.0
PCDA_Exam2.2	35.0	25.0	**76.0**	14.0
PCDA_Exam2.3	35.0	25.0	**64.0**	16.0
DHEP_Exam1.1	90.0	26.0	**80.8**	11.5
DHEP_Exam1.2	90.0	25.0	**76.0**	12.0
DHEP_Exam1.3	90.0	22.0	**75.0**	13.6
DHEP_Exam1.4	90.0	10.0	**90.0**	10.0
DHEP_Exam2.1	90.0	25.0	**88.0**	8.0
DHEP_Exam2.2	90.0	25.0	**84.0**	11.0
DHEP_Exam2.3	90.0	25.0	**72.0**	11.0

Initially, the results appear unremarkable with students performing well across all their exams (as noted by the median percentage in Table 10). However, when examining the dispersion of the average using the inter-quartile range it is possible to see that the PCDA cohort had slightly higher IQRs, implying a larger spread of scores across students than that of IPLDP and DHEP. Whilst these differences are relatively small, it could be indicative of PCDAs being less comfortable with assessments due to a wider and more diverse background of students. This may contrast with IPLDPs who were comfortable with exams in their operational setting and DHEPs who were more comfortable with exams in an academic setting.

Furthermore, when examining the results across each exam, assessments 1.3 and 2.3 for both PCDAs and DHEPs appeared lower than their other assessments. To determine whether student confidence in subjects related to exam performance, the exam topics were compared against the confidence in police knowledge (Figure 8), and police skills and procedures (Figure 9) within TP2. However, apart from traffic legislation appearing to result in lower confidence and lower exam scores, all other topics within exams 1.3 (Burglary, Robbery, Going equipped, Weapons and corrosive substances, Drugs, Assault, Detention in custody, Hate crime, Public Order, Drugs, Exhibits, Licencing, Drunkenness offences, Harassment, Offensive weapons, Role of Legal Advisor) and 2.3 (Drink/Drug driving, Criminal Damage, Confiscation of Alcohol and tobacco, Construction and Use, Licences insurance and MOT, Registration & licensing, Use cause and permit, RTC's, RPN / TOR, HORT10, Driver Rider Offences, Traffic classifications, Critical incidents, Intelligence) did not align with subjects in which students reported lower levels of confidence.

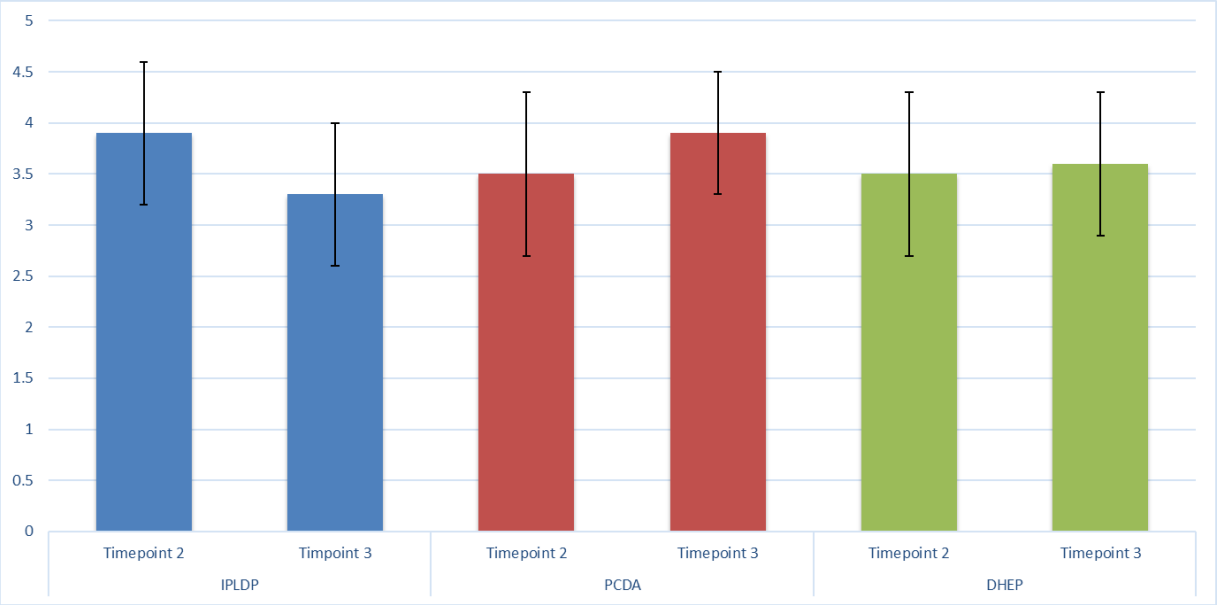
Timepoint Three – End of Tutor Phase

The third round of surveys (timepoint 3 (TP3)) collected metrics on seven quantitative metrics. Six of these were the same as in TP2, but with the addition of a new metric relating to the learning style/evidence-based practice. Furthermore, the same qualitative questions to those in TP2 were repeated to collect data that was comparable over the timepoints. Overall, the survey data collection at TP3 replicated that of TP2, but with the addition of a new metric and the focus of questions being on the tutor phase of the course.

TP3 - Overall confidence and increasing student confidence

As with TP2, overall student confidence was measured on a five-point Likert-type scale. The plotting of means and standard deviations (Figure 12) illustrated that there was a slight difference in confidence, since IPLDPs reporting slightly lower levels of confidence in comparison to PCDAs. This was an inverse change in comparison to TP2, whereby IPLDPs reported the highest level of overall confidence out of all three cohorts in TP2 but the lowest in TP3, and vice versa for PCDA. However, it is important to note that the changes between the timepoints across the cohorts were small. In summary, all ratings of overall confidence fell between 3.3 and 3.9, indicating that all cohorts across the two timepoints appeared to report being 'fairly' to 'mostly' confident in applying learning to practice.

Figure 12: Change in overall confidence across the IPLDP, PCDA and DHEP cohorts between timepoints two and three



When examining the text responses for what would make the student feel more confident, more roleplays and practical experience appeared again as a dominant theme across all three cohorts (*n* = 70).

Course structure also appeared as a theme across all cohorts (*n* = 17), but especially within the (DHEP *n* = 11) cohort. This included suggestions such as bringing forward opportunities to work with different policing departments to gain experience that was more specific, as opposed to only making this available after the student was made independent. In addition, there were also suggestions about follow-ups by the tutors once the student had been made independent. The latter recommendation was closely linked to another theme interpreted from responses across all three cohorts, which was more time with tutors (*n* = 11).

In addition, students also mentioned more training in specific topic areas, such as mental health (*n* = 6), Crown Prosecution Service (*n* = 5), as well as some less frequent requests such as more time with Crime Scene Investigation (CSI) or Criminal Investigation Department (CID). Furthermore, female participants stated that top-up Personal Safety Training would have increased their confidence. The response highlighted the potential importance of examining gender disparities in student learning, in addition to the factors within this report, to holistically address student confidence.

Finally, a theme that was predominantly raised by DHEPs (*n* = 9), was more time training on IT systems.

TP3 - Tutor Phase Review

The tutor phase review focused on six questions (see Table 11) measured on a five-point Likert-type agreement scale.

Table 11: Survey questions relating to the tutor phase review

Survey Question for TP3 – Tutor Phase Review	Question label
I believe that communications during the tutor phase have been appropriate and informative	Q1
I know what is expected of me during my probation	Q2

I am not concerned with the volume of work involved	Q3
I have no immediate concerns or worries	Q4
I know who to approach with concerns or worries	Q5
I found the style of tutor delivery to be a good way of learning	Q6

This found that all three cohorts provided a similar review of the tutor phase, with a dip in scored occurring in relation to questions three (not concerned about volume of work) and four (no immediate concerns or worries). The lower average scores and higher standard deviations indicated that there was a range agreement, with students across all three cohorts identifying potential problems with workload and had worries or concerns following the tutor phase.

Figure 13: Tutor phase review across the IPLDP, PCDA and DHEP cohorts

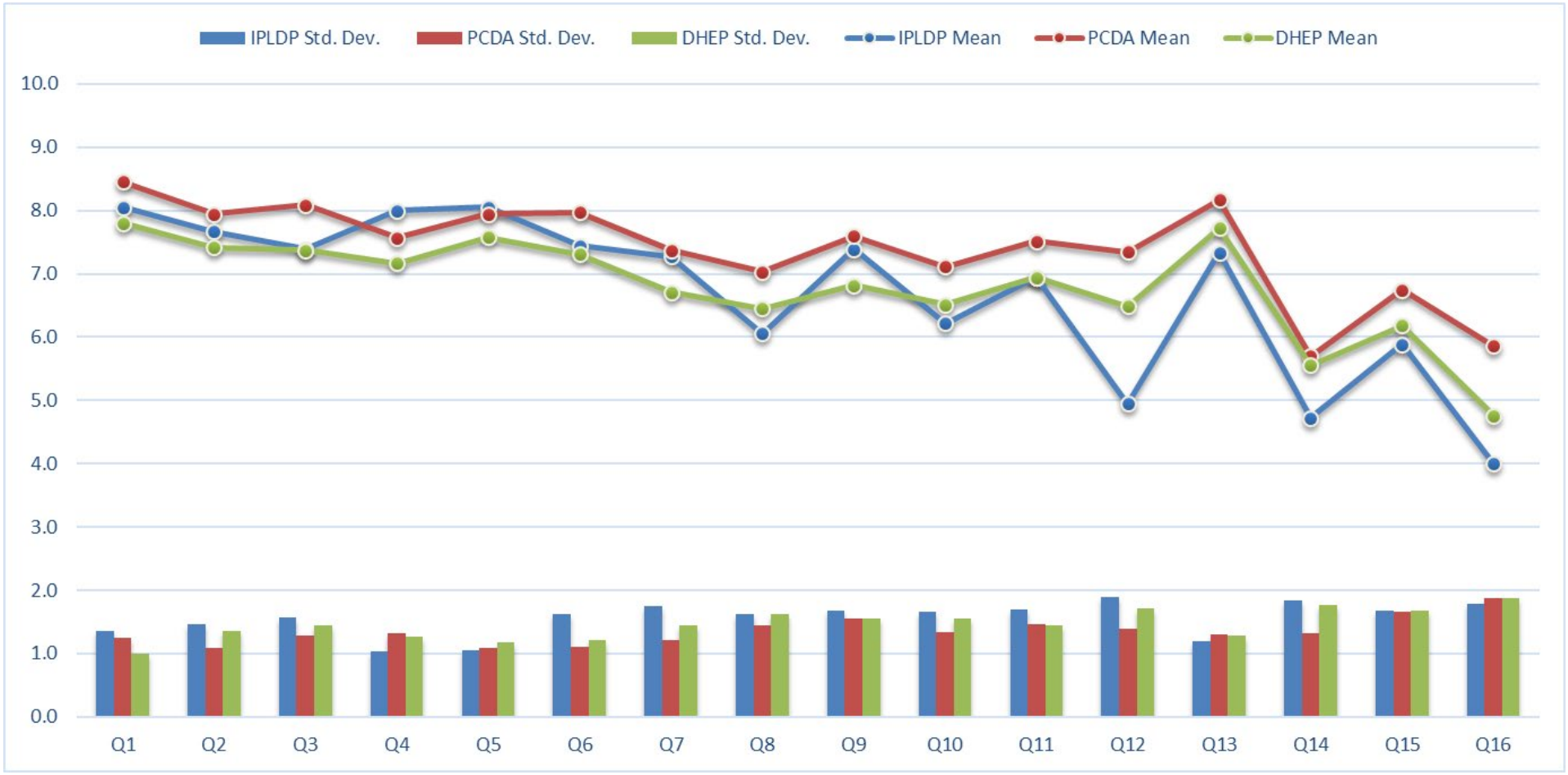
TP3 - Confidence in policing knowledge

In relation to police knowledge, the same questions were repeated from TP2 across a 10-point Likert-type confidence scale.

Table 12: Survey questions concerning confidence in police knowledge

Survey Question for TP3 – Police knowledge	Question label
Powers of arrest	Q1
Powers of entry	Q2
Powers to stop and search people, vehicles, premises	Q3
Theft Act – Theft, burglary, robbery, handling, vehicle crime, fraud, abstract electricity	Q4
Assaults	Q5
Criminal damage offences	Q6
Offensive weapons, bladed articles, going equipped	Q7
Harassment, Anti-Social Behaviour, Hate crime	Q8
Public order, drunkenness, liquor licensing	Q9
Drug legislation,	Q10
RTCs, drink/drug driving	Q11
Traffic legislation – Driving docs., con. & use, lighting,	Q12
Domestic abuse	Q13
Sexual offences	Q14
Child protection	Q15
Firearms	Q16

Figure 14: Confidence in police knowledge across the IPLDP, PCDA and DHEP cohorts



From the visualisation in Figure 14, the PCDA and DHEP cohorts reported similar average scores (all fell within a difference of 1 point) in confidence across 16 areas of police knowledge. Whilst IPLDPs followed a roughly similar trends, their average scores appeared to be a lot 'noisier' and with higher standard deviations. All three cohorts reported lower levels of confidence in relation to sexual offences (Q14) and firearms (Q16), with IPLDPs also reporting lower levels of confidence in relation to Traffic legislation (Q12).

With reference to all other questions, majority of the scores across all three cohorts fell between 6 and 8.5. This illustrated how there was a moderate to high level of confidence in policing knowledge across a range of different areas for all three cohorts. In addition, when descriptively compared to TP2, there appeared to be little change in the confidence of policing knowledge, with plotted averages also mainly falling between 6 and 8.

TP3 - Confidence in police skills and procedures

The same 10-point Likert-type confidence scale was used across 12 questions relating to police skills and procedures (see Table 13 for questions and labels and Figure 15 for plot of means and standard deviation).

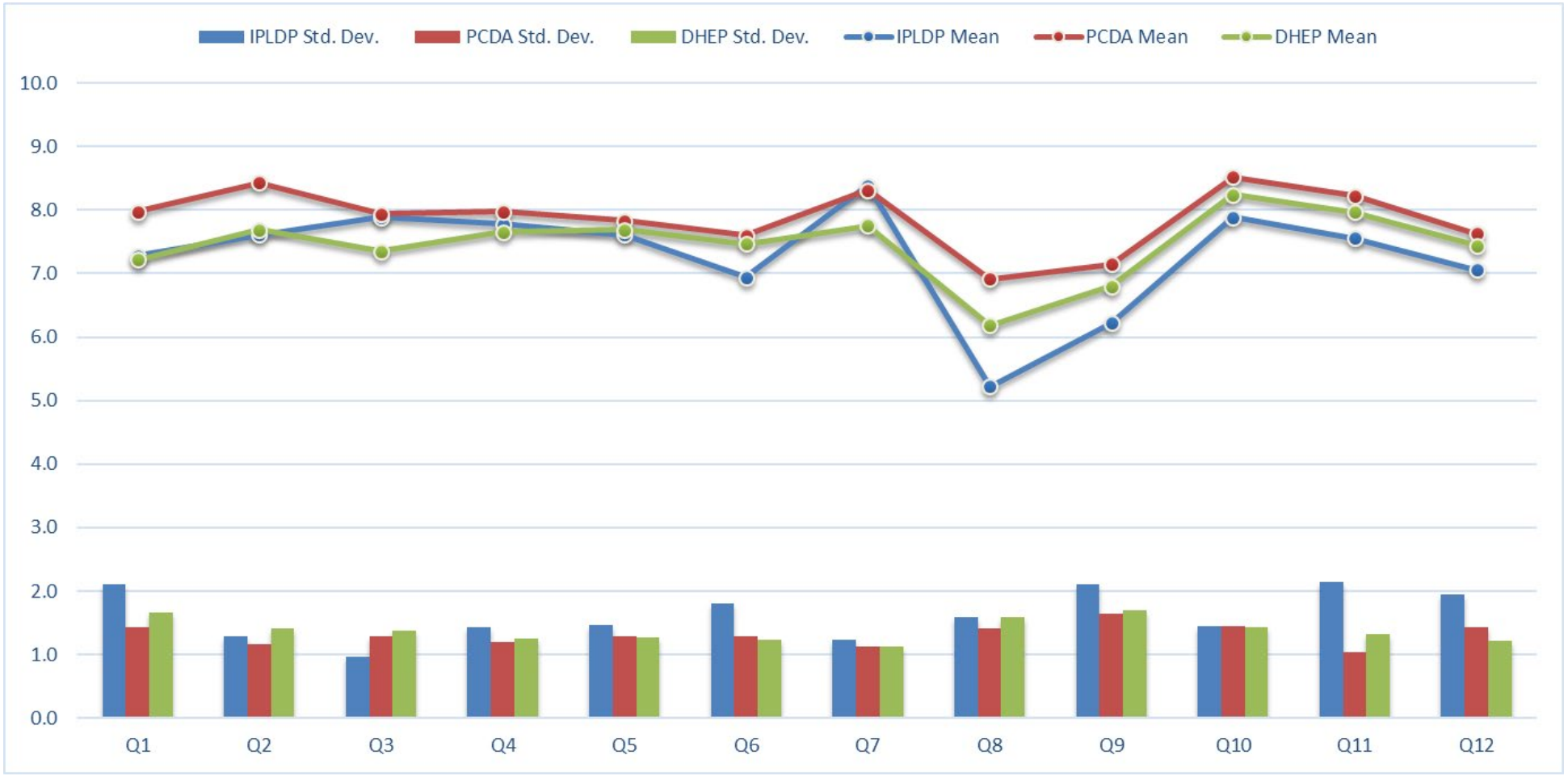
The Figure illustrates a consistent trend again across all three cohorts, with majority of average scores occurring between 7 and 8.5, indicating high levels of confidence. This appeared to be greater than most points within police skills and procedures at TP2, where most averages fell between 6 and 7.5.

Focusing again on TP3, there was a dip in reported confidence in relation to question eight (other disposals) and nine (dealing with RTCs). Furthermore, the averages around other disposals had a wider spread of average scores, but with smaller *SD*s in comparison to other metrics. This indicated that the cohorts, were fairly consistent when reporting lower levels of confidence in other disposals, which was particularly prominent in the IPLDP cohort.

Table 13: Survey questions concerning confidence in police skills and procedures

Survey Question for TP3 – Police skills and procedures	Question label
Use of constabulary computer programs/systems	Q1
Conducting searches of people, vehicles, property	Q2
Initial management and investigation of a crime	Q3
Dealing with missing persons/sudden death	Q4
Interviewing witnesses	Q5
Interviewing suspects	Q6
Arresting suspects/custody procedure (including PST)	Q7
Other disposals – Reporting suspects/PND/Fixed penalty/VDRS	Q8
Dealing with RTC	Q9
Completing checks on persons/vehicles – submitting intelligence	Q10
Dealing with property Lost/found/exhibits/prisoners	Q11
Mental Health – dealing with vulnerable, place of safety	Q12

Figure 15: Confidence in police skills and procedures across the IPLDP, PCDA and DHEP cohorts



TP3 - Evidence-based Practice

The new metric within TP3 was interpreted to relate to evidence-based practice and focused questions on the students' attitudes towards research in practical policing. This was likely done to establish whether the university-based cohorts had more positive attitudes towards research in practice in comparison to standard policing training. This question asked students to provide a level of agreement (using a five-point Likert-type scale (with both positive and negatively worded statements) across 12 questions (see Table 14).

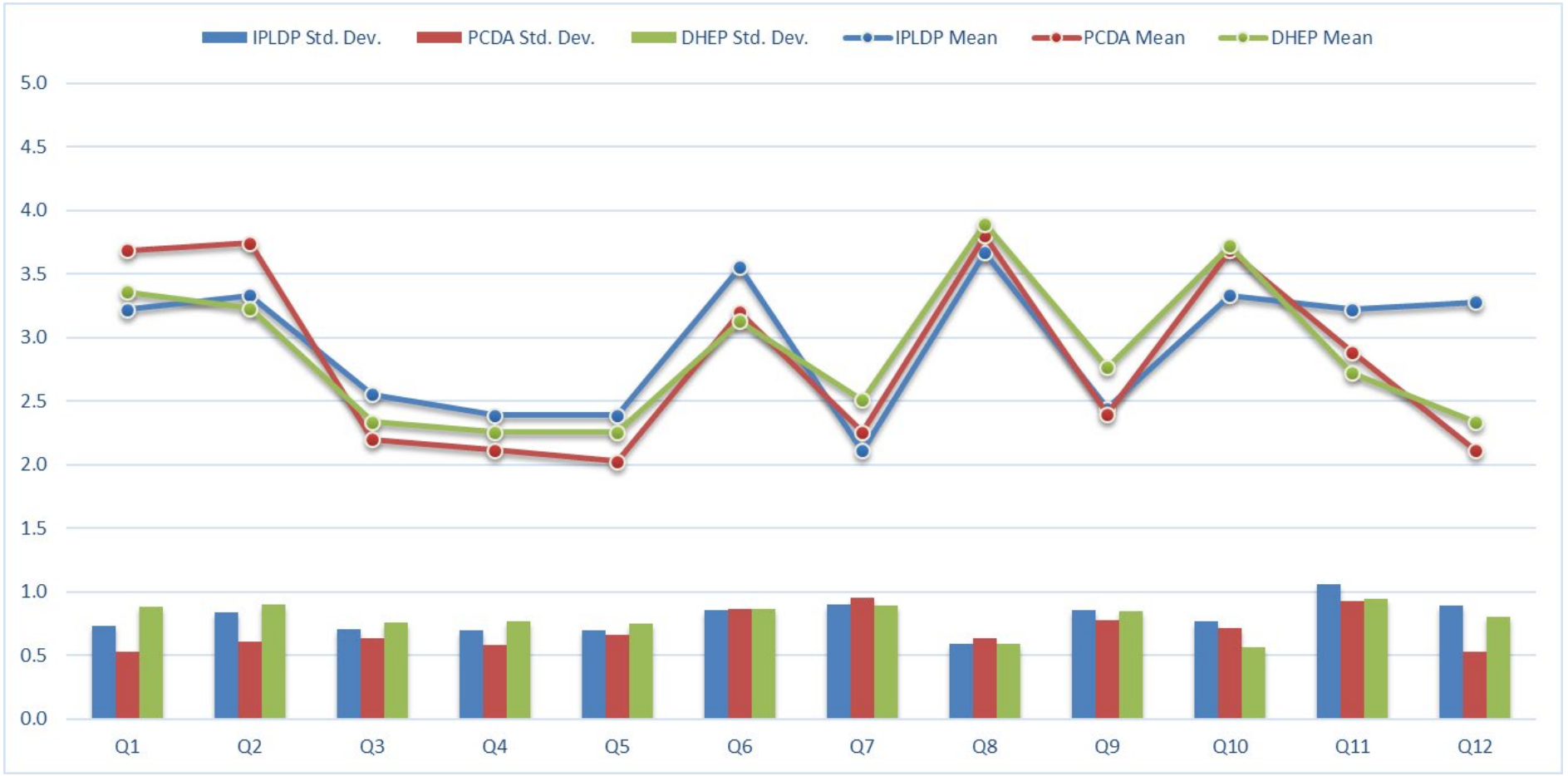
Examining the plots of averages and standard deviations (Figure 16), the trends were fairly consistent across the three cohorts, with IPLDP providing slightly higher scores in relation to question 12 (do not get enough opportunity to reflect and learn from my experiences). This indicated that, IPLDPs had similar views to those on the PCDA and DHEP courses, but reportedly did not feel they got the same opportunity to reflect on evidence-based practice.

Across the 12 individual questions, students rated lower agreement for the negatively worded questions 3 (evidence based policing is a fad), 4 (research evidence is not relevant to my role) and 5 (evidence based policing is only for senior leaders), as well as in regards to e-learning. There was greater levels of agreement to question 8 (development activities enable me to do my job better) and 9 (my force places a high priority on my professional development), indicating that all students agreed that their forces were invested in their development. Finally, there was moderate agreement with the positively worded statements about evidence-based practice, such as (Q1- I use research evidence to inform my day-to-day decision making; and, Q2 - I try to keep up to date with research evidence in policing), as well as identifying that experience in more important that research (Q6).

Table 14: Survey questions concerning evidence-based practice

Survey Question for TP3 – Evidence-Based Practice	Question label
I use research evidence to inform my day-to-day decision making	Q1
I try to keep up to date with research evidence in policing	Q2
Evidence based policing is a fad	Q3
Research evidence is not relevant to my role in policing	Q4
Evidence based policing is only for senior leaders (superintendent rank or above or equivalent)	Q5
Experience is more important than research evidence in determining what works in policing	Q6
E-learning is an appropriate way of learning	Q7
Development activities enable me to do my job better	Q8
Professional development is viewed as a tick box exercise	Q9
My force places a high priority on my professional development	Q10
I know where to get information on CPD opportunities in my force	Q11
I do not get enough opportunity to reflect and learn from my experiences	Q12

Figure 16: Students attitudes towards evidence-based practice across the IPLDP, PCDA and DHEP cohorts



TP3 - Student engagement

As in TP2, student engagement was made up of six questions, whereby respondents were required to state how true the statements were about themselves. The same questions ("I've been able to make up my mind about things"; "I've been dealing with problems well"; "I've been feeling useful"; "I've been feeling relaxed"; and, "I've been feeling close to other people") were administered at TP3. The responses indicated that all three cohorts were consistent in average scores, reporting between 3.5 and 4.0 for most statements, with only a slight dip in relation to question 4 (I've been feeling relaxed). The results illustrate how the students 'often' felt positively engaged. Of note, however, is the larger *SD* for IPLDP in relation to question 3 (I've been feeling useful). This potentially indicates that there was a greater spread of scoring across this average, which may potentially indicate a student or a small number of IPLDP students did not necessarily feel useful throughout the tutor stage.

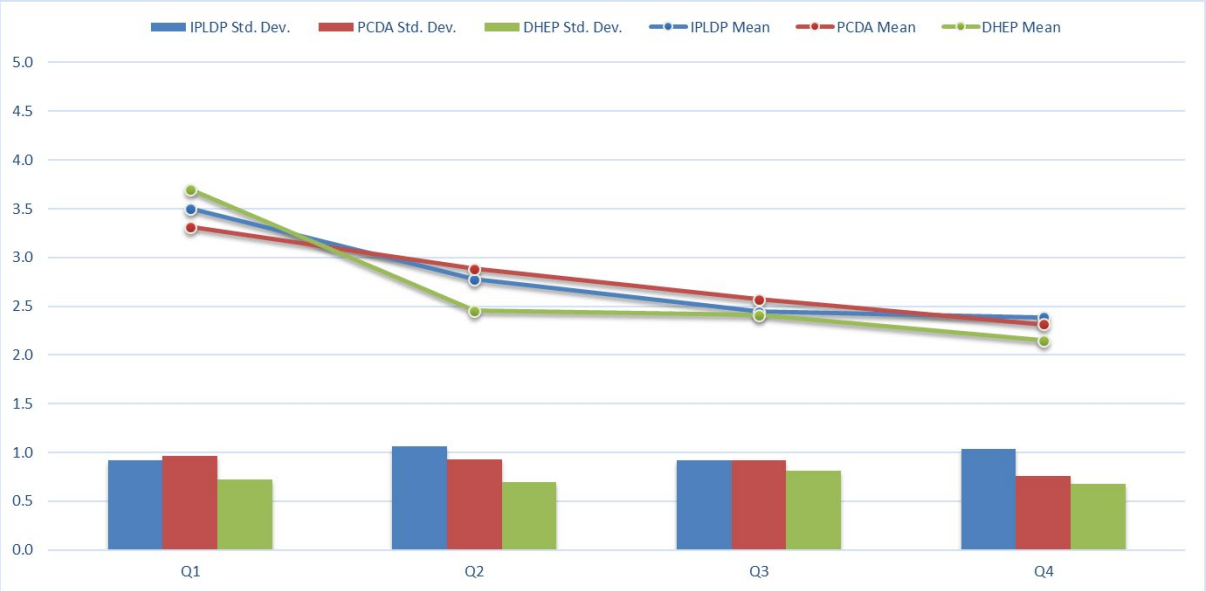
Figure 17: Student engagement across the IPLDP, PCDA and DHEP cohorts

TP3 - Student wellbeing

The four questions relating to wellbeing were repeated again at TP3 ("I have sufficient time and energy to engage in activities outside of work"; "My work leaves me with little energy to do any other non-work activity"; "Tension and stress from work often adversely affects the rest of my life"; and, "Due to work strain, I ignore my personal life needs"). After plotting the

mean scores and standard deviations (Figure 18), it was possible to visualise that all three cohorts followed a similar trend in responses. Furthermore, the responses followed a similar pattern to TP2, where there were higher scores for the positively worded first question, followed by lower scores for the later negatively worded questions. There was a slightly different trend in responses from the IPLDP cohort. Whilst in TP2 they reported 'often; to Q1, and then 'rarely' to Q's 2, 3 and 4, in TP3 they reported much more moderate averages (close to 'sometimes' for all metrics), which suggested that their wellbeing had declined slightly since TP2 and became more aligned with students undergoing the PCDA and DHEP courses.

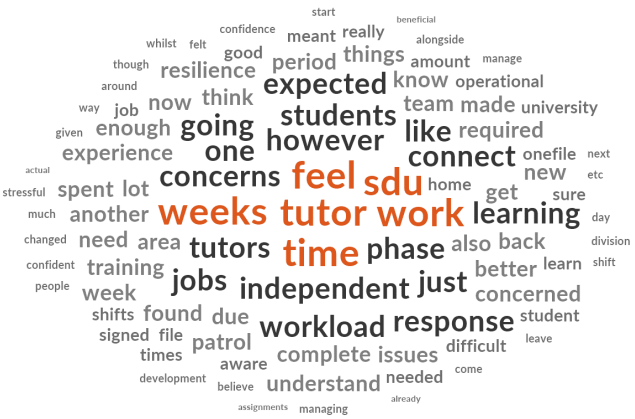
Figure 18: Student wellbeing across the IPLDP, PCDA and DHEP cohorts



TP3 – Free text responses

Concerns or worries?

Figure 19: Word Cloud of student responses to concerns or worries during end of tutor phase.



All three cohorts expressed worries about their workload when they moved towards independence with general duties (*n* = 15). Some stated that their workload was manageable but were worried that it would increase in future, with other stating that their workload was already unmanageable, and it meant that they were struggling to find time to complete enquires or conduct duties as part of their role.

Students from the DHEP and PCDA cohorts also raised worries with the course structure (*n* = 12). The comments mainly related to communication about expectations at various units/stages of the course, as well as timescales provided to complete work. There were also comments about the paperwork taking up a lot of time, with students stating that there was too much focus on portfolio completion rather than operational experience, as well as missing opportunities to attend incidents due to the amount of write ups in OneFile.

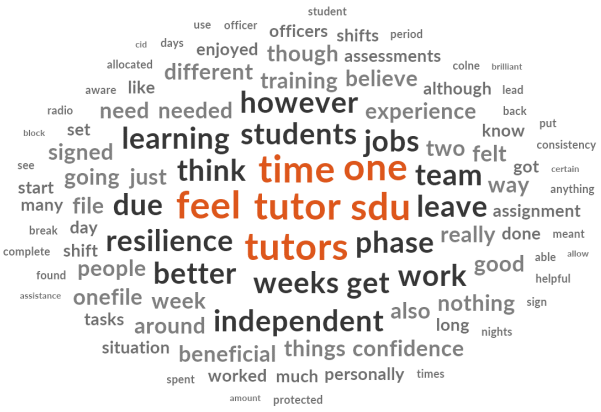
Knowledge of police systems and IT occurred as a worry for both DHEPs and PCDAs (*n* = 11). Many of these comments specifically related to understanding how to use and progress cases using OneFile and CONNECT.

The final theme, and one that predominantly was mentioned by the DHEP cohort (*n* = 14), was time spent with tutors. Important comments illustrated how some students felt that their ability to pick things up quicker led to less time with their tutors, since their attention was then spent on other students who were struggling. In addition, consistency in the assignment

of tutors appeared important, with some stating that they were assigned several tutors as opposed to one, meaning that there was sometimes confusion over their progress and support needed. It was also commented that having numerous tutors also made some students feel nervous, as they did not know who best to approach with particular problems.

Anything done differently during tutor phase?

Figure 20: Word Cloud of student responses to anything that could be done differently during tutor phase.



A theme apparent across all three cohorts concerned tutors (*n* = 32), of which these comments mainly referred to how the time spent with tutors was not long enough, tutors had too many students to manage, and no/little continuity between students and their tutor. Specifically in IPLDPs, the theme related to a very mixed picture of the support received from tutors, with some stating that their tutor had leave during their phase and they felt it impacted on their learning, through to others stating that their tutor was very supportive even following on from the tutor phase. With regards to PCDAs, some students noted that they would have appreciated taking the lead over their tutor in some circumstances to maximise their experience and learning (i.e., taking the lead using police radio). Others explained how the resilience tutors and tutor constable sometimes provided conflicting ways of on how to do particular processes. This led to some confusion over the consistency in approaches to some police systems/problems.

A second theme relating to the things to do differently related to the course structure, and this was mentioned across all three cohorts (*n* = 25). Within this theme, the PCDA cohort explained how taking two weeks of leave after being made independent resulted in a slight

loss of confidence when returning back to the role as the skills had not been immediately put into practice. Suggestions for immediately 'finding their feet' during independence, with leave perhaps occurring during block three or just before.

Any other comments?

Any other comments involved a lot of repetition of themes from previous responses, such as comments relating to tutors, course structure, and IT issues/training. Many of the comments within this section were not interpretable into parent themes.

Statistical Modelling of the Key Metrics in Timepoints 2 and 3

Whilst majority of the metrics throughout the timepoints concerned Likert-Type responses, there were some metrics that could be thematically grouped for statistical comparison. For both TP2 and TP3, the questions relating to: Police knowledge; police skills and procedure; student engagement; and, student wellbeing were summed into total scores. Furthermore, TP3 contained an additional metric around evidence-based practice that was also summed into a total score (see Table 15).

The scoring was achieved by determining whether the individual sub-questions were positively or negatively phrased to apply the appropriate direction of coding. For example, when coding a total metric of student wellbeing, the first question was positively phrased ("I have sufficient time and energy to engage in activities outside of work"). This meant that a higher score indicated positive views towards the total metric and so the coding remained the same (always = 5; never = 1). The other three questions were negatively worded ("My work leaves me with little energy to do any other non-work activity"; "Tension and stress from work often adversely affects the rest of my life"; and, "Due to work strain, I ignore my personal life needs"), meaning that the scoring for these questions was reversed because the smaller scores (denoting 'rarely' and 'never') indicated more positive views. As such, those who answered 'never' to negatively worded questions would score 5, with those who answered 'always' scoring 1. This meant that the total score for each student, once summed across all four questions, ranged between 4 (low level of wellbeing) and 20 (high level of wellbeing).

Once all questions were appropriately coded, Cronbach's alpha was used to examine the internal consistency of each scale. This found that nearly all scales fell above what is considered an acceptable level of internal consistency ($\alpha > .70$). However, the sub-items relating to the TP3 evidence-based practice scoring fell slightly below the acceptable level of .07 ($\alpha = .69$). This was due to inconsistency in the responses to Q9 ("Professional development is viewed as a tick box exercise"), whereby deletion of the sub-item from the total score raised the internal consistency of the overall total score to $\alpha = .78$.

Furthermore, when examining multicollinearity of the scales in preparation for regression analysis, a correlation matrix found that the scales developed for police knowledge and police

skills and procedures were correlated. In TP2 the correlation coefficient was *r* = .65, indicating a moderate correlation which was unlikely to impact upon the regression. However, at TP3 the scales illustrated a stronger correlation *r* = .78, which would likely cause distortion within the statistical modelling (Doorman *et al.*, 2013). Subsequently police skills and procedure was not included in modelling at TP3 (illustrated in Table 15).

Table 15: Overview of score development and model templates applied to each target variable.

Metric	Included in modelling	Scale	Number of sub-questions	Positively worded	Negatively worded	Total score range	Cronbach's alpha (*α*)
Model Template One – TP2 metrics							
TP2: Police knowledge	Yes	10-point scale	16	16	0	16-160	.955
TP2: Police skills and procedure	Yes	10-point scale	12	12	0	12-120	.916
TP2: Student engagement	Yes	5-point scale	6	6	0	6-30	.715
TP2: Student wellbeing	Yes	5-point scale	4	1	3	4-20	.838
Model Template Two – TP3 metrics							
TP3: Police knowledge	Yes	10-point scale	16	16	0	16-160	.929
TP3: Police skills and procedure	No (Multicollinearity)	10-point scale	12	12	0	12-120	.904
TP3: Student engagement	Yes	5-point scale	6	6	0	6-30	.785
TP3: Student wellbeing	Yes	5-point scale	4	1	3	4-20	.813

Model Template Three – TP3 EBP metric							
TP3: Evidence-based practice	Yes	5-point scale	11	6	5	11-55	.776

The scales above in each timepoint were analysed against three target variables relating to the students' demographics:

1) Entry route – comparison of the IPLDP cohort against PCDA and DHEP (multi);
2) Academic qualifications - Split of qualifications into those below level 6 qualifications and those who had level 6 qualifications and higher (binary).
3) Previous policing experience - Coded when the student had either been a PCSO, Special, or both, with the second category coding capturing student with no previous experience (binary).

As all three target variables were categorical, logistic regression was used for analysis. More specifically, multinomial logistic regression was selected to analyse Entry Route as it contained three categorical levels, and binary logistic regression was applied to the target variables of academic qualification and previous policing experience.

Entry route

Analysis of the TP2 total scores across the three entry routes revealed a statistically significant model, χ^2 (8) = 18.887, p = .015. The key driver to the model was wellbeing. It illustrated that, in comparison to a 1-point increase in wellbeing score by IPLDP, the PCDA scores increased by 0.73 (95% CI: 0.57 – 0.94) (p = 0.15). This indicated that the PCDA reported lower levels of wellbeing in comparison to the IPLDPs during the classroom phase. This trend was not observed in the DHEP cohort. No other TP2 total scores provided a statistically significant relationship across entry routes (p > .05).

The analysis of the TP3 metrics also uncovered a statistically significant model that appeared to fit the data, χ^2 (6) = 20.333, p = .002. The model highlighted how the PCDA cohort reported

higher scores in relation to police knowledge (1.05 increase in PCDA (95% CI: 1.01 – 1.10) to every increase of 1 in IPLDP) (p = .009). The finding suggests that the PCDA cohort reported having greater levels of police knowledge following on from the tutor phase when compared against IPLDP students.

Finally, modelling of the evidence-based practice total score across the three cohorts was statistically significant, χ^2 (2) = 6.902, p = .032. This illustrated that the PCDA cohort had higher scores in relation to Evidence-Based Practice (1.17 increase in PCDA (95% CI: 1.04 – 1.33) to every increase of 1 in IPLDP) (p = .01). It is important to note that a similar trend was also observed within DHEPs, however, this was not statistically significant (p = .06).

Academic qualifications

When modelling the various total scores of TP2 against those who had level 5 qualification or lower, against those who had level 6 and 7 qualifications, the analysis found a non-significant model (p > .05). This meant that none of the TP2 metrics were associated with the respondents that had different levels of academic qualifications.

The modelling of TP3, however, did find a statistically significant model, χ^2 (3) = 13.154, p = .004. Two metrics appeared to provide statistically significant explanation within the model. The first metric that appeared to have a relationship with academic qualifications at the tutor phase was police knowledge. Within this finding, for each 1-point increase in police knowledge in those who had 'no formal' to level 5 qualifications, those who had level 6 and 7 qualifications scored 0.97 (95% CI: 0.94 – 0.99) (p = .01). This suggested that those with higher levels of qualification reported lower levels of police knowledge following on from the tutor phase. The second metric was wellbeing, whereby for every 1-point of wellbeing score increase for 'no formal' to level 5 qualifications, there was a 1.20 increase (95% CI: 1.03 – 1.39) in wellbeing score for those with level 6 and 7 qualifications (p = .017). This finding highlighted a greater level of wellbeing amongst those with higher level qualifications during the tutor stage.

Finally, the modelling of the total score relating to evidence-based practice produced non-significant model (p > .05).

Previous police experience

Analysis of previous policing experience against all TP2 total metrics uncovered a statistically significant model, χ^2 (4) = 23.253, p < .001, which illustrated how the confidence of police skills and procedures was statistically significant (p < .001). It is also important to note, that the moderately correlated metric of confidence in policing knowledge fell close to statistical significance but fell above the p > .05 threshold. With regards to confidence in police skills and procedure, the parameter estimates illustrated how those with previous policing experience reported scores that were 1.09 (95% CI: 1.04 – 1.13) for every 1-point increase in those without any previous police experience.

Modelling previous policing experience against the TP3 total metrics found a non-significant statistical model (p > .05).

Finally, modelling of the TP3 evidence-based practice metric found a weak statistically significant model, χ^2 (1) = 4.402, p = .036. This illustrated that for every 1-point increase in score for those without previous policing experience, there was a 0.92 (95% CI: 0.86 – 1.00) increase in score for those with previous policing experience (p = .04). This illustrated how those without previous policing experience had slightly more positive attitudes towards evidence-based practise in comparison to those who had been a PCSO, Special or both.

Summary

The statistical analysis illustrated that at TP2, IPLDPs reported higher levels of wellbeing in comparison to PCDA, but there was not enough evidence to suggest that wellbeing was significantly different between IPLDPs and DHEPs. This may be related back to the descriptive analysis where the PCDA cohort reported feeling the least prepared of all three groups. In addition, analysis of TP2 also highlighted how students with previous policing experience reported higher levels of confidence in police skills and procedures. It is also important to note that policing knowledge also fell close to the imposed cut-off of statistical significance. Unsurprisingly, the findings seemed to indicate that those with previous policing experience felt more confident with policing skills and procedures, likely due to the fact they had previous experience using them within their role as a PCSO or Special.

Analysis of TP3 illustrated that those with level 6 and 7 academic qualifications reported higher levels of wellbeing but lower levels of police knowledge, in comparison to those with 'no formal' to level 5 qualifications. Whilst this finding must be interpreted in the context of the student undergoing different levels of education within their entry route, it may suggest that those with higher qualifications may have been used to a more academic setting/lifestyle and may also be more aware of 'unknown' knowledge. As such, they may have been more aware of further knowledge or held themselves to a higher standard of learning in comparison to those with lower levels of qualification. In addition, their familiarity with an academic setting may have prepared them more for the workload and pressures, thus resulting in greater levels of wellbeing in comparison to those with lower qualifications. It is also important to note that there was no corresponding relationship between previous policing experience and confidence in police skills and procedures following the tutor phase. Whilst this could illustrate that the knowledge gap had been closed, it is critical to conclude that the absence of a statistically significant finding merely suggests that there was no evidence to indicate a difference with certainty.

Finally, the analysis of TP3 evidence-based practice metric illustrated two relatively weak models illustrating how PCDAs (in comparison to IPLDPs) and those without previous policing experience were more likely to report more positive views towards evidence-based practice.

Discussion

Police Education is undergoing a revolution. Beginning with the recognition in the 1980s and 1990s that traditional policing methods had little or no impact on crime rates, there has been increasing pressure over the last few decades for a shift towards evidence based policing. In Britain a key moment in this shift was the launch of the Initial Police Learning and Development Programme (IPLDP) in 2006. However, though this programme was intended to educate police officers in the ways of evidence based policing, its inheritance of a predominantly training culture and alongside its limitations as a Level 3 qualification, meant that IPLDP effectively marked the opening of a process of change rather than its realisation. The next step on this process was the launch of Police Education Qualifications Framework (PEQF) as a series of connected degree level programmes (Level 6 qualifications) in collaboration with several Higher Education Institutions (HEI's) including UCLan. Alongside the launch of a standard undergraduate degree in Professional Policing, two on-the-job programmes of learning were created: a three year Police Constable Degree Apprenticeship (PCDA) culminating in a Level 6 qualification for non-degree holding applicants to the police service alongside a two year Degree Holder Entry Programme (DHEP) for those officers who already held a Level 6 qualification.

The present study is intended to measure the response of trainee police officers undergoing the new education routes. Lancashire Constabulary conducted surveys at three time points – after one week, twenty-four weeks and thirty four weeks of the courses – to allow for a comparative assessment of attitudes towards the IPLDP, PCDA and DHEP courses. This data analysis was carried out by colleagues from UCLan.

There were two standout features of the data: First, IPLDP, PCDA and DHEP students all had very similar experiences, both positive and negative, across the three courses. This is particularly interesting given that the launch of PEQF provision at UCLan was quickly followed by the Covid Lockdown, with its attended and previously unforeseen shift to online learning. Positively, all three cohorts enjoyed their learning experience, especially roleplay and scenario based learning, and praised their tutors. Negatively, all recognised problems of work-life balance. This problem was more pronounced amongst PEQF Officers who had more academic demands on their time, and suggested the need for more time and resource given over to their education both by UCLan and Lancashire. Second, while all three cohorts

expressed a commitment to evidence based policing, the IPLDP students expressed concern that they had insufficient opportunity to critically reflect on what they had learnt. This concern suggests that PEQF marks not only a step in the right direction, but it is one that fits with the hopes and expectations of the new police recruits.

Understanding the experiences of IPLDP and PEQF students

Over the course of the twentieth-century the standard model of policing has been shown to have little or no effect on crime rates. Characterised by rapid response, random patrols, and reactive investigations, the fundamental, indeed existential, limitations of this approach to policing became, as David Bayley wrote in *The Future of Policing* (Oxford: Oxford University Press, 1994), "one of the best kept secrets of modern life".

Police effectiveness came under increased scrutiny in the 1980s and 1990s as crime rates ballooned at the same time as public sector organisations came under increasing governmental pressure to evidence their usefulness. While the police were not the first institution to experience such critical scrutiny, the cultural shift was such that it was only a matter of time before they were called upon to justify their costs by evidencing their efficiency and effectiveness. The subsequent emergence of Evidence Based Policing is, in part, a response to this situation: the police service has been compelled to submit its practices to scientific scrutiny to unpick the wheat of what works from the chaff of what does not. Put simply, policing has been forced to rethink its entire approach to replace ineffective old ways with more effective new approaches.

This sea change in the nature of policing informed similarly profound questions about existing approaches to police training. Put crudely, insofar as scientific evidence challenged existing practices, it suggested the need for new forms of critically imaginative police education that transcended the limitations of those earlier modes of on-the-job learning that tended to reproduce ineffective practices across the generations. A key moment in the emergence of this new mode of teaching and learning came through the formation of IPLDP in 2006. This reform amounted to a positive step towards a national, evidence based approach to policing (education). However, IPLDP was unable to fully realise its goal because, despite there being some external academic and expert input, it largely continued the kind of in-house delivery

that remained fragmentary across constabularies while reproducing too much of the old training ethos that the new more coherent national education process was supposed to replace.

PEQF is intended to mark a major advance on this situation by initiating a progressive overhaul of police education with the aim of radically improving policing in the twenty-first century. While recognising the continuing importance of training for certain areas of policing, PEQF is intended to underpin evidenced based policing as executed by independent, academically trained and critical thinking Police Officers. Indeed, it is because, as Peter Neyroud has insisted, Evidenced Based Policing can only work through police officers who understand the status of evidence. Therefore, Evidence Based Policing and graduate qualifications are two sides of the same coin: they are both necessary aspects for a Police Service made up of Officers with the knowledge and critical thinking skills necessary to make complex risk assessments and accountable decisions.

Given the long-term goals of the PEQF, any measurement of success at such an early stage is obviously premature. In evaluating the efficacy of PEQF, analysis is needed over decades of delivery in order to assess whether the routes have the ability to usher in the kind of cultural shift hoped for by Neyroud and others. Unfortunately, though inevitably, this report says little about such a pivotal issue. That said, there are promising pointers in the direction of a positive cultural shift in relation to police attitudes towards both evidenced based policing specifically, as well as academia more generally, as a critical knowledge base for good sense in policing. Indeed, this comparative evaluation of PEQF (DHEP and PCDA) and IPLDP officers through the analysis by UCLan staff of pre-existing survey data collected by Lancashire Constabulary illuminates the relative success of the shift to a shared Academia-Constabulary model of teaching. More remarkably, it has done so in the most unpropitious circumstances, including national lockdowns.

The responses of IPLDP, PCDA and DHEP students to surveys at weeks one, twenty-four and thirty-four of their courses are interesting not merely for what they wrote but also for what remained unwritten. Despite widespread and voluble complaints, common across the education sector from primary to higher levels, about the limitations of online delivery during Covid, the surveys seem to track a generally consistent level of satisfaction amongst IPLDP, PCDA and DHEP students.

This aspect of the survey is particularly interesting because although some IPLDP students found themselves working alongside PCDA and DHEP students, the IPLDP cohort started policing before the PCDA and DHEP students and experienced a significantly longer period of 'normal' policing and learning before the Covid lockdown. Despite this experience of a more positive environment for teaching and learning, the evidence that all three cohorts were more or less equally satisfied is a very positive finding for the PEQF provision.

The fact that PEQF satisfaction rates remained consistent with those of IPLDP is especially remarkable given the relatively high numbers of PEQF as opposed to IPLDP students. Because of the government's uplift in police numbers the DHEP cohort was some 377% larger than the comparator IPLDP cohort while the PCDA cohort was 95% larger than the IPLDP group. These numbers are interesting because of the widespread recognition that, all things being equal, larger class sizes typically correspond to increased difficulties of provision. This is because small group teaching tends to be more effective than teaching larger groups. There are a number of well-attested reasons for this: First, there are more opportunities for student-centred learning in small groups; Second, small groups allow more opportunities for communication between tutors and individual students and between students themselves; Third, small classes give tutors the time and opportunity to ask more challenging questions, making use of pair and group work and engaging the class in sustained discussion; Fourth, smaller classes can more easily become a community with shared aims and with a positive ethos and higher expectations on the part of both the tutors and students; fifth, smaller groups allow more time for tutors to handle differentiation within groups; and, sixth, the tutor in smaller groups has more time to review student progress (McGlynn, 2018).

The fact that satisfaction rates remained broadly stable across the shift from IPLDP to PEQF consequently amounts to a vote of confidence in the PEQF provision. This is despite the CoP already highlighting concerns in its own research into four early PCDA cohorts who complained of difficulties balancing workloads between degree work and the day-to-day demands of policing, and tensions between them and other serving officers who did not hold degrees. These concerns were magnified by worries about the need for extra study skills support and better communications between the constabularies and the universities. While some similar concerns are reproduced within the current project, our study is interesting not only because it tends to mirror CoP's findings that PCDA students viewed the university aspect

of their course positively because of their commitment to developing a deeper knowledge alongside critical thinking skills, but also because it has reproduced these findings in the context of Covid.

For obvious reasons relating to recruitment procedures the IPLDP group was more academically diverse than either the PCDA or DHEP groups. However, whereas this diversity might have been expected to create academic tensions across the cohort, the relative small size of the IPLDP group should have facilitated a more positive learning environment while the fact that IPLDP is a level 3 qualification and only 3 of the 18 students on this cohort had less than a level 3 qualification would also mediate against these tensions.

Of the 18 IPLDP students in the relevant cohort surveyed by Lancashire Constabulary, two thirds were male while 50% had some sort of policing background – either as specials or PCSOs. Half of these students had a degree prior to joining the police, with the rest having qualifications between level 2 and level 5.

The comparator PCDA group was almost twice the size of the IPLDP group (35 against 18). Moreover, while the PCDA group had a greater ratio of female students than the IPLDP group (40% against 33%), only about a third of the group had prior policing experience either as Specials or as PCSO. All members of this group fell into a narrower range of pre-course qualifications – between A' level and Foundation degree level – than the more diverse IPLDP group.

DHEP was by far the largest group of the three, with 86 members of whom almost 42% were female. Similar to the PCDA group, but substantially less than the IPLDP group, 30% of DHEP members had previous experience either as Specials or PCSOs or both. Obviously, all DHEP students had a degree and 18% had Masters degrees.

In relation to issues of motivation at TP1 all three cohorts seemed to be in agreement as to why they had joined the police: they believed in the excitement of the work, they wanted to advance their careers while aiming to help people in their communities. They also cited familial support and job status, while salary, opportunity for learning and intellectual curiosity had less of an influence on the students' motivations to join the police. There is some evidence that PCDAs and DHEPs reported higher influences in relation to opportunities to learn while working, but this conclusion is weak and would need further research.

In relation to self-assessed preparedness at TP1 there were generally higher average scores across the IPLDP and DHEP cohorts, with the PCDA reporting lower levels of preparedness. This difference can perhaps be explained by the lower average entry qualifications for PCDA students who unlike 100% of the DHEP cohort and 50% of the IPLDP cohort did not have an undergraduate degree upon entry to the profession. Irrespective of this difference, all three cohorts expressed concerns about workloads at this juncture.

In relation to TP2 question of confidence in relation to applying course based knowledge in practice IPLDP students rated themselves slightly more confident than PEQF students. At this juncture concerns were raised by PEQF students about online teaching and over-reliance on top-town teaching style through PowerPoint.

In relation to TP2 questions about classroom practice, the take-home result common across all three cohorts is a preference for scenario based learning, with lectures rated positively but less so and e-learning rated neutrally. The obviously negative consequences of lockdown are evident here. Less evident is the fact that outside of lockdown students at UCLan would have had access both to the Hydra suites and to the village for roleplay scenarios. As these environmental supports are both now available for scenario based learning, it is likely that a concrete solution is now accessible to address the problems posed by students about classroom practice. TP2 answers relating to confidence about policing knowledge and skills were broadly uniform across the three cohorts. Similarly, measures of student engagement at this point were fairly uniform – though the IPLDP cohort did suggest feeling more relaxed and closer to others in the group. Yet, it is unclear whether these slight differences relate to increased academic pressure on PEQF students, or if they are more related to the smaller cohort size of the IPLDP group and their participation outside the period of lockdown when teaching was mainly online. Answers in relation to student wellbeing were interesting insofar that all three cohorts shared a similar pattern of results, though IPLDP's answers were more pronounced – both in relation to positively and negatively worded questions.

Students from all three cohorts agreed that assessments should be more evenly spread over the year, while PEQF students complained about online delivery and called for better communications between UCLan and Lancashire Police. Other than that, all students commented that courses and tutors were good – though DHEP students called for improved lecturing styles. TP2 exam grades were uniformly good, though PCDA students had a wider

spread of marks possibly indicating that, as a less traditional group of students, they were less comfortable with traditional forms of assessments.

The third round of surveys at TP3 collected data for questions that were identical to those asked at TP2 but with the addition of a new metric relating to the learning style and evidence-based practice. Overall, the survey data collection at TP3 replicated that of TP2 for the shared questions.

In relationship to evidenced based practice it is interesting to note that all three cohorts shared a commitment to this form of policing, though IPLDP students reported that they did not feel they got the same opportunity to reflect on evidence-based practice. This is a profoundly important finding that suggests not only a general commitment among new officers to the sea-change in policing envisioned by the NPCC's Vision 2025 document but also that Neyroud was right to suppose that university based education is necessary to realise this vision. Similarly, the fact that students with level 6 and 7 academic qualifications reported higher levels of wellbeing but lower levels of police knowledge at TP3 is suggestive of a more critical framework that is open to future deepening of police knowledge.

Beyond this finding the rest of the results of the survey at TP3 relating to issues of workload, course structure, communications between Lancashire Constabulary and UCLan, and abilities to contact tutors while important are less fundamentally so. They relate to practical matters that are in a sense an inevitable consequence of teething issues with new courses – as magnified by problems associated with Covid. Concretely, these comments suggest the need not merely for better organisation but also for more protected study time for students from Lancashire Constabulary on the one hand and more resource from UCLan for one to one teaching on the other. These are important issues that must be addressed by the police, CoP and universities, evidenced through the OFSTED report into PCDA provision at Staffordshire: "Leaders must ensure that police constable apprentices have sufficient time to complete their studies. They need to make sure to reduce the burden of completing assignments and reflective logs in the apprentices' own time".

Limitations

There are a range of limitations with the current work, meaning that caution is advised in the interpretation of results. Firstly, the comparative IPLDP cohort began their course in 2018 and would have undergone a relatively normal period of police training. This is contrasted to the PEQF cohorts who began their courses in 2020 and would have been subject to national lockdowns and a move from in-person teaching to online learning. The adverse experiences may have lowered levels of satisfaction with courses as they were not implemented as originally planned.

The IPLDP cohort contained 18 students in comparison to PEQF cohorts which involved larger student numbers. Not only would this have a practical impact on the delivery of the courses but means that statistical analysis comparing the IPLDP as a baseline may lack sufficient power to detect meaningful differences owning to the lower sample size.

Finally, missing data was handled using median imputation. A major limitation in this approach is that it artificially deflates variable variance. Therefore, readers should be mindful of this limitation when interpreting the quantitative metrics which largely report the averages of each cohort across many dimensions.

Conclusion

Taken in the whole, this study illuminates real strengths of PEQF provision as an evolutionary development of IPLDP from which officers should develop a critical understanding of evidence based policing. PEQF seems to be working despite lockdown, though this study does point to obvious areas for improvement including more protected time for student officers to learn, more scenario based teaching, better lecturing, less online provision and more time for critical reflections on that which is being taught and learned. Uplift will mean meeting these needs will be difficult, however the current report provides an evidence-base from which improvements can be made to benefit PEQF students in future.

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Appendix A: Ethical Approval

University of Central Lancashire
UCLan

University of Central Lancashire
Preston PR1 2HE
01772 201201
uclan.ac.uk

15 April 2021

Nathan Birdsall
School of Forensic & Applied Sciences
University of Central Lancashire

Dear Nathan

Re: BAHSS Ethics Review Panel Application
Unique Reference Number: BAHSS2 0177

The BAHSS Ethics Review Panel has granted approval of your proposal application 'Comparing the Policing Education Qualifications Framework (PEQF) educational strands to standard police training in Lancashire and Cumbria'. Approval is granted up to the end of project date.*
It is your responsibility to ensure that

- the project is carried out in line with the information provided in the forms you have submitted
- you regularly re-consider the ethical issues that may be raised in generating and analysing your data
- any proposed amendments/changes to the project are raised with, and approved by, the Ethics Review Panel
- you notify EthicsInfo@uclan.ac.uk if the end date changes or the project does not start
- serious adverse events that occur from the project are reported to the Ethics Review Panel
- a closure report is submitted to complete the ethics governance procedures (existing paperwork can be used for this purpose e.g. funder's end of grant report; abstract for student award or NRES final report. If none of these are available, use the e-Ethics Closure Report pro forma).

Yours sincerely

Richard Davies
Deputy Vice-Chair
BAHSS Ethics Review Panel

* for research degree students this will be the final lapse date