Chapter 3
Unveiling the Commonly Adopted Teaching Methods, Strategies, and Tools in College-Based Higher Education:
Insights From a Delphi Study

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ABSTRACT

This chapter considers the pedagogical approaches used within college-based higher education (CBHE) in England. While a rich literature exists concerning the teaching and learning approaches adopted in university-based higher education, teaching practice in CBHE has been largely under-researched. Using data from a three-round online Delphi panel study comprising 16 expert CBHE teachers, this chapter provides novel insights into teaching practice in this sector. The data generated through this innovative methodology is unique and transforms what we know about CBHE teaching in England, complementing the handful of previous studies in the area. The expert panel identified 76 teaching methods, strategies and tools before reaching a consensus agreement on 54 of these which they viewed to be commonly adopted pedagogical approaches in CBHE. The chapter offers a detailed exploration of the Delphi methodology before revealing practical conclusions pertaining to the commonly adopted pedagogical approaches. These insights can arguably also be transferred to the wider college-based education teaching contexts

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such as 14-19 provision, adult education, and apprenticeship delivery. Furthermore, the findings identify workforce gaps in knowledge which may serve as a catalyst for college-based professional development activities.

1. INTRODUCTION

Further education colleges (FECs) in England are diverse institutions offering academic, technical and vocational education to students of various ages. Whilst historically, their population has been largely post-compulsory education and training for 16-19-year-olds which has sought to bridge the gap between school and university or work, FECs also offer programmes for 14–16 and adult education. One area of adult provision that is offered by many FECs is higher education (HE) qualifications such as bachelor's degrees, higher nationals and teacher education programmes. This provision is commonly referred to as college-based higher education (CBHE). In England, CBHE has experienced significant growth since the turn of the millennium, benefitting from fiscal policy seeking to widen participation in HE amongst under-represented and disadvantaged groups (Bathmaker, 2016). CBHE is now considered as an increasingly local, personal and potentially more financially-viable alternative to studying at a university, with 80% of CBHE students living locally to where they study compared to just 37% of university-based students living locally (Education and Training Foundation, 2017).

As a broad research area, CBHE has received significant academic attention in recent times, yet, practitioner research concerning the teaching practices of CBHE teachers remains sparse, with only a handful of academic works having been published. Teaching practices within university-based HE, on the other hand, are plentiful with authors providing insight into their implementation, benefits and commonality among disciplines. This chapter presents the findings of practitioner research along with specific reference to where existing limited knowledge of CBHE teaching has been strengthened, challenged and new contributions made to what is known. These findings should also interest the general further education (FE) practitioner because the teaching approaches unearthed here in CBHE resonate very closely with approaches that the author has observed FE teachers adopting over the previous 11 years of working within the sector. Given that CBHE teachers are likely to progress internally at FECs from previous roles in FE, these approaches may have indeed originated in the FE context and are therefore of significance to any teacher in college-based education.

This chapter draws on data from practitioner research which is centered upon a novel Delphi investigation. This is a type of research that is particularly suited to busy professionals such as those working in FECs. The Delphi technique is a

research approach which involves a panel of expert participants undertaking a series of surveys with a view to achieving consensus on a prominent issue (Keeney et al., 2011). The participants are selected based upon specific inclusion criteria but do not meet face-to-face and are not aware of who else has been selected to participate; this is to ensure anonymity and minimise the influence of dominant voices and bias. The flexibility of this technique is particularly useful for practitioners working in FECs who typically experience high teaching and administrative workloads. The technique has been commonly adopted in the health sector, but its application here in the context of a FEC appears to be the first of its kind. It offers practical insights into 54 teaching methods, strategies and tools which were commonly used by experienced CBHE teachers that readers can directly apply to diversify their repertoire of instructional approaches in college-based settings. The data presented below is generated from an expert panel comprising 16 experienced CBHE teachers in England. It is useful for the reader to understand that the practitioner research presented is situated within a broader PhD investigation into CBHE teaching practices.

2. BACKGROUND OF HIGHER EDUCATION TEACHING

Students studying HE encounter various teaching approaches. These approaches can be categorised into two types: teacher-centered and student-centered (Murphy et al., 2021; Mladenovici et al., 2022). Teacher-centered approaches are those that rely on teachers' input and direct transmission of knowledge which students passively receive (Murphy et al., 2021). The traditional didactic lecture is the cornerstone of the teacher-centered approach. This approach is often referred to as tutor-centered, teacher-focused and content-focused with terms being used interchangeably. Conversely, student-centered approaches are those which engage students as active members in the learning process (Uiboleht et al., 2018). Banning (2005) suggests these approaches are facilitative and Socratic rather than didactic by design. This approach is also referred to as student-focused and learning-focused, again, with terms being used interchangeably. Whilst it is acknowledged that teachers' practice may not always be confined to these polarities, for example, teaching approaches may be "dissonant" – adopting a combination of both types (Uiboleht et al., 2018) – these two approaches form the basis of the literature presented here.

The traditional, didactic, teacher-centered lecture is cited as the most common teaching approach in HE (Djajalaksana et al., 2013; Farashahi & Tajeddin, 2018; Asarta et al., 2021). Its origins stem from medieval times where its cost-effectiveness allowed for transmission of knowledge to large audiences (Evans, 2022). However, a significant critique of the approach is the depth of learning which it offers. Through the lens of Marton and Säljö's (1976) concept of deep and surface

learning, scholars have suggested that the lecture is associated with predominantly surface level learning (Mladenovici et al., 2022) where information is transmitted with a view to be memorised, in contrast to deeper learning whereby students actively explore theoretical knowledge in relation to everyday experiences to inform conclusions about new knowledge. These active alternatives (Haak et al., 2011; Yoder et al., 2021) stem from constructivist views of learning (Uiboleht et al., 2018) which argue that knowledge should be socially constructed. Some examples of such teaching approaches include: case studies (Farashahi & Tajeddin, 2018; Bernardi & Pazinato, 2022), cooperative learning (Asarta et al., 2021; Button et al., 2021), discussion methods (Arias et al., 2016; Abdulbaki et al., 2018) and role playing (Rao & Stupans, 2012). What is evident within the literature regarding HE pedagogy is that the sample settings of the research investigations are almost always exclusively traditional HE settings (i.e. universities). Alternative settings such as FECs have rarely been represented within the literature. This practitioner research addresses this gap by investigating specifically the pedagogical approaches used in CBHE settings.

3. CONTEXT: COLLEGE-BASED HIGHER EDUCATION

Typically, HE takes place in universities but a considerable proportion takes place in other providers such as FECs (Connolly et al., 2023) and is referred to as CBHE or Higher Education within Further Education (HE in FE). This chapter adopts the term CBHE in line with the terminology adopted throughout the book. CBHE tends to comprise undergraduate provision, for example bachelor's degrees, higher national diplomas, foundation degrees, teacher education programmes or higher-level qualifications between level 4 and level 6. Programmes are usually formed in response to local need. Avis and Orr (2016) refer to this as FECs' civic responsibility in meeting the needs of the local labour market. This role and function of CBHE is often also associated with the responsibility of 'widening participation' (Bathmaker, 2016; Lavender, 2020) which was a key driver of various fiscal initiatives seeking to broaden access to HE in England through FECs.

With this fiscal drive to widen participation, CBHE experienced significant growth in the 2000s, with FECs accommodating almost 10% of the HE student populace (Association of Colleges, 2020). Moreover, one third (33.3%) of English students aged 19 and under who entered HE through the University and College Admissions Service (UCAS) in 2022-23 did so at a FEC (Association of Colleges, 2022). According to Braun (2023) on average, CBHE providers have a student population of 530. CBHE provision is often framed in policy as a vocational alternative to studying at a university (Ingleby, 2019; Bullock & Henry, 2023). Students are cited as electing to study HE at FECs for the 'hands on experience' offered (Rapley,

2014) and the intimate and personal pedagogy which typically epitomises such programmes (Allen & Parry, 2022).

4. PEDAGOGICAL APPROACHES WITHIN COLLEGE-BASED HIGHER EDUCATION SETTINGS

Various scholars have contrasted the differences between learning cultures in CBHE and traditional university-based HE. The learning environments in the two types of institutions are said to be culturally dissimilar (Greenbank, 2007) with CBHE students experiencing more intensive classroom contact (Bathmaker, 2016). Consistent within the literature is that CBHE offers significantly smaller class sizes than universities (Allen & Parry, 2022; Bullock & Henry, 2023). Smaller class sizes allow for a more personal pedagogy to exist.

Bullock and Henry (2023) claim that students' experience of teaching in CBHE and university-based HE is very different with more established expectations for teaching being found in CBHE. CBHE teachers appear to use different approaches to university teachers with CBHE teaching being more interactive and student-centered and universities adopting more teacher-centered approaches (Burkill et al., 2008; Simm et al., 2012; Tucker et al., 2020). Whilst an abundance of literature exploring teaching methods in university-based HE exists, there is a relative dearth of empirical literature concerning CBHE teaching. To date, approximately seven published empirical CBHE studies have claimed to investigate teaching approaches. The seven studies comprise: two peer-reviewed empirical studies exploring singular case study colleges (Young, 2002; Rapley, 2019), four peer-reviewed empirical studies which have sampled between 4 and 17 case study colleges (Harwood & Harwood, 2004, Burkill et al., 2008; Gale et al., 2011; Rapley, 2014) and one large-scale non-peer reviewed empirical report sampling 30 colleges (King & Widdowson, 2012). The studies have largely sought to establish whether a distinctive pedagogy exists and if so, what does this look like in classroom practice, however, only two studies (Burkill et al., 2008; King & Widdowson, 2012) have cited specific teaching approaches adopted.

A large-scale study by King and Widdowson (2012) sampled 559 CBHE teaching staff across 30 colleges. Participants were issued a questionnaire comprising seven teaching methods and asked to rank them in order of usage. The methods were: formal lecture, group seminar, individual tutorial, student study groups, practical activity, work placement and online activities. The practical method was rated the preferred teaching method for almost 75% of the respondents with seminar teaching being a close second. Given that only seven options were presented to choose from,

the results should be treated with some degree of caution as participants could not submit their own teaching methods which would have strengthened the dataset.

Burkill et al. (2008), four years prior, also administered a questionnaire (the modified 'Approaches to Teaching Inventory') to 106 respondents across 17 colleges, spanning various disciplines. Most respondents (85%) were experienced CBHE teachers with at least four years' experience. The questionnaire included an open-ended response section which investigated ways of lecturing and opinions on teaching methods. Whilst many of the respondents were keen to point out the caveat that the questionnaire had predefined the characteristics of lecturing, the collective sample cited a wide range of teaching methods and strategies that they used. Lectures, seminars and group tutorials were identified as important methods while demonstrations, team teaching, work-in-progress supervision and one-to-one support were also mentioned. Additionally, the authors identified some less-common methods and activities that respondents referred to: active learning, applied field trips, role play, practical activities, investigations, problem-solving, discussion, debates, question-and-answer, snowballing, case studies, projects, guest speakers, games, quizzes, simulations and workshops. However, the specific regularity of these approaches was not explored.

Whilst these two studies indicated some common teaching approaches, the adopted single questionnaire approach has its limitations in terms of unpicking the pedagogy of CBHE classrooms. Burkill and colleagues' (2008) work is the only empirical peer-reviewed work in the last 20 years to offer any light on the sector's common teaching practices. Resultingly, there is an absence of published pedagogical research to support practitioners who are new to teaching HE in FECs. This chapter addresses this gap within the literature and provides insight into contemporary CBHE teaching practices in England. Furthermore, it complements the findings of Burkill et al. (2008) and King and Widdowson (2012) through the adopted mixed-methods methodology which allowed for a wealth of specific teaching methods, strategies and tools to be discovered.

The research question in this study was:

- What teaching methods, strategies and tools do college-based higher education teachers commonly use in their teaching practice?

5. METHODOLOGY

5.1 Study Design

An online classical Delphi study, comprising three iterative rounds was undertaken. In each round, participants received an online survey, developed and administered through Microsoft Forms. Since its creation in the 1950s by the RAND Corporation and the United States Air Force as a forecasting tool for predicting military threats, various definitions of Delphi research have been proposed leading to multiple interpretations of the technique. For example, Keeney (2010) suggests that 10 different versions exist. Put simply, however, Delphi research is a technique that adopts a multi-staged survey design to attempt to achieve consensus on a prominent issue (Keeney et al., 2011). Its participants are often referred to as experts as they are usually recruited based upon specific inclusion criteria (for example, minimum years of experience).

The Delphi technique has many advantages, for example, its approach is useful for collecting data in areas where existing knowledge is limited (Beiderbeck et al., 2021). Moreover, it boasts a flexible methodology which may be particularly appealing to the busy college-based professional. Because of its flexibility as a data collection method, its use is widespread, especially in nursing and health-based research. Recently, a noticeable growth in its application in educational settings can be observed (for example: Fogo, 2014; Bond et al., 2021; Leigh, 2021). The method is not, however, without its criticisms, and it is important for researchers to be aware of these prior to any study commencement. Given the high-speed nature of working in FECs, these general limitations may be exacerbated further. Table 1 provides an overview of its advantages and limitations.

Table 1. Advantages and Limitations of the Delphi Technique

Advantages	Limitations
■ Very flexible methodology ■ Data can be collected in geographically dispersed locations ■ Does not require physical meeting space(s) ■ Relatively inexpensive ■ Protects participants' anonymity ■ An effective method for bringing together busy professionals who might not otherwise have time to meet ■ Participants have the opportunity to collate and synthesise their contributions and respond at a convenient time ■ Avoids any direct confrontation that can occur in other group-based methods ■ Participants can reconsider views in light of the contributions of others	■ No universally agreed or definitive methodological guidelines ■ Can be a complex task for the researcher(s) handling the amount of data generated ■ Potential for low response rates ■ Can be time-consuming which may lead to high withdrawal rates ■ Participants' response speed can be slow which may affect prompt commencement of later rounds ■ Has been criticised for a lack of universally agreed consensus approach ■ Researchers may underestimate time period for data collection and analysis

According to Strafford et al. (2021) and Bell et al. (2023), the scientific rigour of Delphi research can be enhanced when the inclusion criteria for selecting the expert panel, the intended number of rounds, the analytical approach and the percentage threshold for consensus agreement/disagreement is determined prior to study commencement. As such, these methodological actions were adopted in the current practitioner research. These actions strengthen the credibility of the dataset by addressing some of the commonly-cited limitations of Delphi studies.

5.2 Expert Panel Selection and Recruitment

Experienced CBHE teachers were the targeted participants in this research. Participants, referred to as the expert panel, were recruited using purposive sampling via a professional social media platform. Following institutional ethical approval from Leeds Trinity University where the author was registered as a PhD student, a recruitment advert was posted on the platform with details for prospective participants who met the inclusion criteria to request further information about the study. To be eligible to participate, the CBHE teachers had to: (a) have a minimum of five years' experience teaching CBHE; (b) be currently teaching CBHE and have been doing so for the previous three years; (c) be teaching face-to-face (classroom) delivery; (d) be teaching either a franchised/validated honours, top-up or foundation degree programme, a teacher education programme at level 5-6, or a Higher National Certificate/Diploma in England; and (e) hold a recognised teaching qualification from a list provided.

Sample sizes in Delphi studies vary considerably, however, 10-18 participants are considered optimal for consensus to be achieved (Vogel et al., 2019; Bell et al., 2023). Twenty-two participants met the criteria for the study and were invited to

participate, with 19 completing Round One (86.4% response rate), 17 of 19 completing Round Two (89.5% response rate) and 16 of 17 completing Round Three (94.1% response rate). Interestingly, the sex composition of the expert panel was largely male, whereas the sex composition of the FEC teaching workforce is in fact 60.2% female (Gov.UK, 2023). Participant recruitment was undertaken without any intended participant demographic and the sampling was contingent on random chance. Consistent with research literature (Cooper & Pearman, 2021), the panel's teaching commitment was generally split across FE and HE, with participants having an average of 68% of their teaching hours attached to CBHE. Table 2 outlines the panel's background data which adds a useful context to the dataset detailing participant ages, current roles, teaching experience and disciplines. All participants provided electronic informed consent to participate.

Table 2. Background Data of Panel Experts

	Round 1 (n = 19)	**Round 2 (n = 17)**	**Round 3 (n = 16)**
Sex			
Male	73.68% (14)	76.47% (13)	75.00% (12)
Female	26.32% (5)	23.53% (4)	25.00% (4)
Age			
25 to 29	15.79% (3)	17.65% (3)	18.75% (3)
30 to 34	15.79% (3)	17.65% (3)	18.75% (3)
35 to 39	10.53% (2)	11.76% (2)	12.50% (2)
40 to 44	21.05% (4)	17.65% (3)	18.75% (3)
45 to 49	15.79% (3)	11.76% (2)	12.50% (2)
50 to 54	15.79% (3)	17.65% (3)	12.50% (2)
55 to 59	5.26% (1)	5.88% (1)	6.25% (1)
Current role			
Academic Group/Curriculum Leader or Manager	26.31% (5)	23.53% (4)	25.00% (4)
Lecturer	21.05% (4)	23.53% (4)	18.75% (3)
Programme Leader	36.84% (7)	35.29% (6)	37.50% (6)
Pastoral Manager	5.26% (1)	5.88% (1)	6.25% (1)
Teaching and Learning Lead	10.53% (2)	11.76% (2)	12.50% (2)

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Table 2. Continued

	Round 1 (n = 19)	Round 2 (n = 17)	Round 3 (n = 16)
Discipline			
Criminology	5.26% (1)	5.88% (1)	6.25% (1)
Education Studies	31.58% (6)	29.41% (5)	31.25% (5)
English Literature	5.26% (1)	5.88% (1)	6.25% (1)
Esports	5.26% (1)	5.88% (1)	6.25% (1)
Media Production	5.26% (1)	0.00% (0)	0.00% (0)
Sport and Health	21.05% (4)	23.53% (4)	25.00% (4)
Teacher Training	15.79% (3)	17.65% (3)	12.50% (2)
Travel and Tourism	5.26% (1)	5.88% (1)	6.25% (1)
Veterinary Nursing	5.26% (1)	5.88% (1)	6.25% (1)
Number of years' CBHE teaching experience			
5 to 6	31.58% (6)	35.29% (6)	31.25% (5)
7 to 8	47.37% (9)	52.94% (9)	56.25% (9)
9 to 10	15.79% (3)	5.88% (1)	6.25% (1)
11+	5.26% (1)	5.88% (1)	6.25% (1)
Total number of years' teaching experience*			
5 to 6	15.79% (3)	17.65% (3)	18.75% (3)
7 to 8	15.79% (3)	17.65% (3)	18.75% (3)
9 to 10	26.32% (5)	23.53% (4)	25.00% (4)
11 to 20	21.05% (4)	23.53% (4)	25.00% (4)
20+	21.05% (4)	17.65% (3)	12.50% (2)

* (i.e. all teaching, not limited to CBHE)

5.3 Procedure and Analytic Technique

Prior to commencement, the instruments were piloted with three participants who met the inclusion criteria. Participants were asked to comment upon the content, clarity and phrasing of the questions as well as the layout of the survey, in line with practices observed in Al-Taweel et al. (2022). Participants agreed that the surveys

were unambiguous and feasible in addressing the research question. This ensured content and face validity (Keeney et al., 2011).

The online Delphi procedure aimed to achieve consensus through three iterative rounds, as this is considered optimal for achieving consensus (Iqbal & Pipon-Young, 2009; Strafford et al., 2021) and minimising attrition rates (Leigh, 2021). The literature informs researchers to expect an attrition rate between rounds of 20% (Vogel et al., 2019). Attrition rates were much lower in this study at 11.5% following Round One and 5.9% following Round Two. The study ran between July 2023 and October 2023.

5.3.1 Round One

Based upon the transparent methodology of Bond et al. (2021), the first-round comprised three sections: demographic information, teaching experience and Delphi prompt. The participants, whose expertise stemmed nine academic disciplines (see Table 1), were presented with an open-ended qualitative prompt:

a) Describe the *teaching methods, strategies and tools used* by CBHE teachers in their delivery, providing a minimum of 5 and a maximum of 10.

This chapter explores some key findings informed by data generated from this prompt.

The online survey for Round One was distributed to participants via an email link and remained open for four weeks. Responses from Round One were analysed using the manifest content analysis method. This involved the researcher describing the participants' responses, remaining as close to the actual data and wording as possible (Bengtsson, 2016; Graneheim et al., 2017). The analysed dataset was then corroborated with an independent researcher where 76 teaching methods, strategies and tools were agreed upon. The methods, strategies and tools (or approaches) were grouped into six categories and subsequently presented to the expert panel in the second-round survey.

5.3.2 Round Two

Categories generated from the content analysis in Round One formed the content of the second-round survey. The six categories were: (1) knowledge transmission approaches; (2) interaction-based approaches; (3) learning through doing; (4) tasks and activities; (5) use of digital technologies; and (6) a category for a small number

of additional approaches which were not akin to any other category. Tables 3-8 detail the 76 approaches.

In this round, participants rated their level of agreement with the items from the first round using a 4- point Likert-scale (strongly agree, agree, disagree, and strongly disagree). Following the pilot study, an additional option of "I am not familiar with this" was also added as it became clear to the author and the independent researcher that participants may not actually know what was being referred to by other panel members. This enabled the identification of clear areas of less familiarity and where teachers' knowledge gaps existed. Recent research (see Vogel et al., 2019; Strafford et al., 2021; Bell et al., 2023) has adopted a similar approach, allowing participants to select an "I don't know" option. Often, the "I don't know" option is used in Likert scale research to avoid participants needing to show a substantive position – either that they agree or disagree in some capacity. This, however, would have been contradictory to the aims of the current research. As such, the wording of the fifth option was made more specific in the current study to align more closely with its aims of ascertaining the most used approaches. The data pertaining to "I am not familiar with" responses was, in contrast to aforementioned studies, retained within the analysed dataset and reported on in the wider PhD thesis in which this study stems from.

The purpose of Round Two and beyond in classical Delphi studies is to establish a consensus of responses amongst the panel. Consensus typically refers to a level of collective agreement/disagreement concerning a topic. Consensus seeking is the aim of most Delphi studies but what defines consensus specifically is largely contested (Keeney et al., 2011). Diamond et al. (2014), for example, uncovered 11 methods of defining consensus in academic research. Moreover, it has been claimed that studies often do not adequately define the criteria adopted (Diamond et al., 2014). The most common approach is percentage agreement (Keeney et al., 2011; Diamond et al., 2014), however, a universally agreed percentage value does not exist for Delphi research. Studies have ranged from 51% - 100% consensus threshold (Barrett & Heale, 2020). Based upon most recent studies ranging between 70% - 80% thresholds, consensus in this study was determined by a threshold of ≥75% agreement/disagreement being established.

The second online survey was distributed to the 17 participants who completed Round One via an email link and remained open for two weeks. In the survey, the teaching methods, strategies and tools were rated in terms of their commonality in CBHE. Raw data was analysed descriptively in Microsoft Excel using relative and absolute frequencies (see Tables 3-8).

5.3.3 Round Three

In the final round, each participant received an individualised survey, comprising all items from Round Two presented alongside the group's response expressed as a relative frequency (percentage agreement/disagreement) and a reminder of the ratings that they had given. The panel were asked to re-assess their ratings in light of the group's percentage ratings for the previous round. As noted earlier, various definitions of Delphi research have been proposed leading to multiple interpretations of the technique which offer alternative methodological approaches to what was adopted here, for example, panel members only re-rating (a) items that did not achieve the stipulated consensus threshold in Round Two or (b) items that received at least one 'strongly disagree' rating (Al-Taweel et al., 2022). The decision to progress all items from Round Two in the current study afforded panel members the opportunity to amend their responses. Moreover, the purpose of re-rating the items was to increase the statistical rigour of the data, with stability of consensus being considered achieved if the between-round group responses varied by ≤10% (Vogel et al., 2019; Strafford et al., 2022). The third online survey was distributed to the 16 participants who completed Round Two via an email link and remained open for two weeks. Raw data was analysed descriptively using relative and absolute frequencies and is compared to the data from Round Two in Tables 3-8 to ascertain which items had achieved consensus and which could be considered as stable.

6. RESULTS

A total of 54 teaching methods, strategies and tools achieved consensus (≥75% agreement) in the final round, compared with 51 in Round Two. Twenty-three of these achieved complete consensus (100% agreement), compared with seven in Round Two. Seven items achieved complete consensus in both rounds. In the final round, 43 of the 54 items achieved a stable consensus (79.62%), whereas 11 items achieved a potentially unstable consensus. Findings from the final round are reflective of consensus being achieved. Tables 3-8 summarise the final consensus list. Bold text is used in the tables to denote where ≥75% consensus was achieved; Agreement = agree+strongly agree; Disagreement = disagree+strongly disagree. Data values for "I am not familiar with" are also included in the reporting.

6.1 Knowledge transmission approaches

The first category included ten approaches grouped collectively as approaches which centre upon knowledge transmission (Table 3). Among the list, the panel agreed that eight met the threshold for consensus in the final round. The approaches rated most common were demonstrations, peer teaching / student-led presentations and questioning, each achieving complete consensus. The panel agreed that five other approaches were commonly used in CBHE. Three of these were: guest speakers (87.5%), videos (87.5%) and Socratic questioning (81.25%). There was also consensus that lecturing was a common approach (75%) along with interactive lecturing (93.75%). A key point to note here is that 25% of the panel suggested that lecturing is not currently a common approach used by CBHE teachers. Almost all approaches were well-known by the panel, except marketplaces, whereby 25% of the panel were unfamiliar with this approach.

Table 3. Panel Responses to Statements in the Knowledge Transmission Approaches Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Demonstrations	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Guest speakers	82.35%	17.65%	0.00%	**87.50%**	**12.50%**	0.00%
Interactive lecturing	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Lecturing	76.47%	23.53%	0.00%	**75.00%**	**25.00%**	0.00%
Marketplaces	35.29%	17.65%	47.06%	50.00%	25.00%	25.00%
Mini-conferences	64.71%	35.29%	0.00%	56.25%	37.50%	6.25%
Peer teaching / student-led presentations	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Questioning	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Socratic questioning	94.12%	5.88%	0.00%	**81.25%**	**12.50%**	6.25%
Videos	88.24%	11.76%	0.00%	**87.50%**	**12.50%**	0.00%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

6.2 Interaction-based approaches

The second category included 19 approaches (Table 4). Among the list, 15 met the threshold for consensus in the final round. According to the panel, nine of these approaches were most common and achieved complete consensus. These were: 1:1 tutorials, collaborative learning, cooperative learning, discussing contemporary news media, discussions in small groups, whole-class discussions, group research, group work and seminars. Student-led discussions (93.75%), peer assessment (93.75%), debates (87.5%), peer support (87.5%) and team breakout (87.5%) were highly endorsed. The panel also agreed that e-discussions was a common approach (81.25%). The panel were notably less familiar with three of the approaches: role play (using artificial intelligence) (37.5% unfamiliarity), three-corner debates (31.25% unfamiliarity) and think-pair-share (18.75% unfamiliarity).

Table 4. Panel Responses to Statements in the Interaction-based Approaches Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
1:1 tutorials	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Collaborative learning	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Cooperative learning	94.12%	0.00%	5.88%	**100.00%**	**0.00%**	0.00%
Debates	82.35%	17.65%	0.00%	**87.50%**	**12.50%**	0.00%
Discussing contemporary news media	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Discussions: small group	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Discussions: whole-class	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
E-discussions	70.59%	29.41%	0.00%	**81.25%**	**12.50%**	6.25%
Group research	88.24%	11.76%	0.00%	**100.00%**	**0.00%**	0.00%
Group work	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Role play (using artificial intelligence)	35.29%	41.18%	23.53%	25.00%	37.50%	37.50%

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Table 4. Continued

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Three-corner debates	29.41%	35.29%	35.29%	31.25%	37.50%	31.25%
Peer support	94.12%	5.88%	0.00%	**87.50%**	**12.50%**	0.00%
Student-led discussions	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Seminars	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Peer assessment	82.35%	17.65%	0.00%	**93.75%**	**6.25%**	0.00%
Speed-dating	52.94%	35.29%	11.76%	68.75%	18.75%	12.50%
Team breakout	88.24%	11.76%	0.00%	**87.50%**	**6.25%**	6.25%
Think-pair-share	70.59%	11.76%	17.65%	68.75%	12.50%	18.75%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

6.3 Learning through doing

The third category included 13 approaches (Table 5). Among the list, 12 met the threshold for consensus in the final round. The panel rated active learning, case studies and reflection as most common, each achieving complete consensus. Six approaches were highly endorsed at 93.75% agreement and one approach highly endorsed at 87.5% agreement. The only approach which did not achieve consensus was simulations with only 68.75% of the panel agreeing that this was a common approach. The panel were well-aware of all approaches in this category.

Table 5. Panel Responses to Statements in the Learning through Doing Approaches Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Active learning	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%

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Table 5. Continued

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Case studies	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Community projects	64.71%	29.41%	5.88%	**75.00%**	**25.00%**	0.00%
Educational trips/visits	64.71%	35.29%	0.00%	**87.50%**	**12.50%**	0.00%
Experiential learning	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Industry-specific simulations	76.47%	17.65%	5.88%	**81.25%**	**6.25%**	12.50%
Problem-solving	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Project-based learning	88.24%	11.76%	0.00%	**93.75%**	**6.25%**	0.00%
Real-world application	82.35%	17.65%	0.00%	**93.75%**	**6.25%**	0.00%
Reflection	76.47%	23.53%	0.00%	**100.00%**	**0.00%**	0.00%
Research projects	82.35%	17.65%	0.00%	**93.75%**	**6.25%**	0.00%
Simulations	52.94%	41.18%	5.88%	68.75%	25.00%	6.25%
Vocational experience	88.24%	11.76%	0.00%	**93.75%**	**6.25%**	0.00%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

6.4 Tasks and Activities

The fourth category included 14 approaches (Table 6). Among the list, eight met the threshold for consensus. There was complete consensus for six of these: flipped learning, independent reading, independent research, mind mapping, poster creation and practical. The panel also highly endorsed quizzes and self-assessment, both with 93.75% agreement. The panel were notably less knowledgeable of four approaches, indicating that they were not familiar with these. These were Lego for narrative points of view (43.75% unfamiliarity), whiteboard relay (31.25% unfamiliarity), gamification (18.75% unfamiliarity) and students creating physical or digital artefacts (18.75% unfamiliarity).

Table 6. Panel Responses to Statements in the Tasks and Activities Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Bingo	41.18%	58.82%	0.00%	43.75%	56.25%	0.00%
Flipped learning	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Gamification	47.06%	41.18%	11.76%	50.00%	31.25%	18.75%
Independent reading	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Independent research	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Lego for narrative points of view	23.53%	35.29%	41.18%	25.00%	31.25%	43.75%
Mind mapping	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Poster creation	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Practical	100.00%	0.00%	0.00%	**100.00%**	**0.00%**	0.00%
Quizzes	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Self-assessment	88.24%	11.76%	0.00%	**93.75%**	**6.25%**	0.00%
Students creating artefacts (physical or digital)	47.06%	35.29%	17.65%	62.50%	18.75%	18.75%
Weekly review of journal articles	58.82%	35.29%	5.88%	68.75%	31.25%	0.00%
Whiteboard relay	47.06%	35.29%	17.65%	37.50%	31.25%	31.25%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

6.5 Use of Digital Technologies

The fifth category included 12 tools (Table 7). Among the list, six met the threshold for consensus in the final round. Two of these achieved complete consensus: Microsoft Teams and use of virtual learning platforms. The panel highly endorsed Microsoft PowerPoint (93.75%) and Kahoot! (87.5%). Mentimeter and Padlet were also identified as commonly-used achieving 81.25% panel agreement. The panel suggested a degree of uncertainty around five of the 12 tools, indicating that they were not familiar with these: Thinglink (62.5% unfamiliarity), Flip (formerly

FlipGrid) (37.5% unfamiliarity), Quizlet (31.25% unfamiliarity), Wakelet (31.25% unfamiliarity) and Quizizz (25% unfamiliarity).

Table 7. Panel Responses to Statements in the use of Digital Technologies Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
Flip (formerly Flipgrid)	35.29%	29.41%	35.29%	31.25%	31.25%	37.50%
Kahoot!	88.24%	11.76%	0.00%	**87.50%**	**12.50%**	0.00%
Mentimeter	76.47%	11.76%	11.76%	**81.25%**	**12.50%**	6.25%
Microsoft PowerPoint	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Microsoft Teams	94.12%	5.88%	0.00%	**100.00%**	**0.00%**	0.00%
Nearpod	64.71%	29.41%	5.88%	68.75%	25.00%	6.25%
Padlet	88.24%	11.76%	0.00%	**81.25%**	**12.50%**	6.25%
Quizizz	41.18%	35.29%	23.53%	43.75%	31.25%	25.00%
Quizlet	52.94%	35.29%	11.76%	37.50%	31.25%	31.25%
Thinglink	5.88%	35.29%	58.82%	6.25%	31.25%	62.50%
Use of virtual learning platforms/environments	88.24%	11.76%	0.00%	**100.00%**	**0.00%**	0.00%
Wakelet	23.53%	41.18%	35.29%	31.25%	37.50%	31.25%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

6.6 Additional Approaches

The sixth category included eight approaches (Table 8). Among the list, five met the threshold for consensus in the final round. The panel rated two approaches as most common: differentiated learning and humanistic approach to teaching, each achieving 93.75% consensus. Two approaches were also highly endorsed with 87.5% agreement, these were 1:1 teaching and critical inquiry. Adaptive teaching was the fifth approach which achieved consensus at 81.25% agreement. Panellists indicated less knowledge of the three remaining approaches, suggesting less familiarity with these. These were threshold concepts (43.75% unfamiliarity), critical discourse analysis (31.25% unfamiliarity) and constructive alignment (25% unfamiliarity).

Table 8. Panel Responses to Statements in the Additional Approaches Category

	Round 2 (n = 17)			Round 3 (n = 16)		
Teaching methods, strategies and tools used by CBHE teachers in their delivery	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**	**Agreement (%)**	**Disagreement (%)**	**I am not familiar with this (%)**
1:1 teaching	82.35%	17.65%	0.00%	**87.50%**	**12.50%**	0.00%
Adaptive teaching	88.24%	5.88%	5.88%	**81.25%**	**6.25%**	12.50%
Constructive alignment	47.06%	11.76%	41.18%	62.50%	12.50%	25.00%
Critical discourse analysis	47.06%	17.65%	35.29%	50.00%	18.75%	31.25%
Critical inquiry	88.24%	5.88%	5.88%	**87.50%**	**12.50%**	0.00%
Differentiated learning	82.35%	17.65%	0.00%	**93.75%**	**6.25%**	0.00%
Humanistic approach to teaching	94.12%	5.88%	0.00%	**93.75%**	**6.25%**	0.00%
Threshold concepts	29.41%	17.65%	52.94%	43.75%	12.50%	43.75%

Note: Bold % denotes that ≥75% consensus was achieved; Agreement = agree + strongly agree; Disagreement = disagree + strongly disagree

7. DISCUSSION

This study sampled expert opinions from experienced CBHE teachers on the most common teaching approaches used in CBHE. These findings contribute novel co-created knowledge that will advance the current understanding of CBHE teaching. Moreover, the results provide a major step forward for an area of pedagogical practice which has received very little academic attention. The findings of this practitioner research suggest that practices are more extensive than previous literature unearthed. Methodological limitations in past investigations may explain this. Previous research methods for investigating CBHE teaching have not allowed for open responses, instead participants selected pre-defined items from lists. Additionally, where a larger range of methods have been unearthed (Burkill et al., 2008), regularity of usage amongst participants was not explored. This research therefore clearly advances current understanding of CBHE teaching.

Given the aforementioned dearth of literature pertaining to CBHE teaching practice, the following discussion compares findings to wider teaching practices observed in HE (i.e. university-based) settings, however, there is scope for aspiring

researchers to explore how common these approaches are within the wider FE context. Whilst the findings are not presented in a discipline-specific manner, the participants' expertise spanned nine different academic disciplines (see Table 2) and therefore cover a breadth of curriculum areas typically offered in FECs. These findings should guide teachers in the selection of pedagogical approaches and inform FEC senior management/leadership teams of potential teacher development needs. Selected key categories and findings of this practitioner research study that were deemed to be of most significance for the wider college-based education readership is presented below. Whilst there is not the scope here to present all the key categories and findings, a wider exploration of the these will be presented elsewhere for interested readers.

7.1 Knowledge Transmission Approaches

As means of knowledge transmission, demonstrations, peer teaching and questioning achieved complete consensus (100% agreement). Demonstrations are a teaching approach that involves the teacher developing students' understanding through the showing of an example which acts as a model for students to learn from. The teacher may demonstrate themselves or make use of visual aids such as videos to showcase the example. A prominence of demonstrations has been observed in the Information Systems discipline with Djajalaksana et al. (2013) citing demonstrations to be one of the most frequently used approaches. Lund and Stains (2015), however, found mixed results in the hard sciences when they explored the use of interactive demonstrations. Whilst 53.3% of Physics teachers used the approach, they were reportedly not used by Biology teachers. Demonstrations therefore may be context and discipline specific.

The panel of CBHE teachers agreed that peer teaching (or student-led presentations) was also commonplace. Peer teaching refers to activities where students teach each other. For example, students may be briefed with a task to research a particular concept and produce a short presentation to explain its principles. Students would then use oral and visual methods to develop peers' knowledge of the concept. This approach to teaching through reconstructing knowledge has been found to enhance learning and develop communication and confidence (Stigmar, 2016). Rees et al. (2016) in a systematic review, interestingly found no significant difference in knowledge or skills outcomes for students taught by peers compared to those taught by teaching staff. Therefore, the adoption of this approach observed in CBHE is consistent with existing literature.

Questioning was another approach which achieved complete agreement from the panel. Questioning, often termed 'question-and-answer', comprises the process of the teacher asking students questions to engage them as active members of the learning

process. Questions can sometimes be directed to specific students or asked openly for any student to contribute. They are a common tool for assessing understanding, probing for greater depth or encouraging critical thinking. This finding is particularly novel as the literature on questioning in HE generally is scant. Socratic questioning, which achieved 81.25% agreement amongst the panel in this study, does however feature somewhat. Paul and Elder (2007) suggests that Socratic questioning differs from other types of questioning in that it is systematic, disciplined, and deeper. Dalim et al.'s (2022) views strengthen this distinction with specific reference to knowledge transmission, claiming that Socratic questioning goes beyond questioning as it transmits knowledge to learners by distinguishing between reasonable and unreasonable arguments. Both approaches achieved consensus in the current study. Future research could further strengthen this novel finding by exploring how and why the approaches are used specifically in CBHE or the wider college-based context.

Existing literature (Djajalaksana et al., 2013; Farashahi & Tajeddin, 2018; Asarta et al., 2021) claims that the traditional, teacher-centered lecture is the most common teaching approach in HE. Evans (2022) referred to the lecture as a didactic one-way uninterrupted communication or monologue transmitted to a passive audience. The lecture has been a mainstay in HE since its origins in medieval teaching, however, its dominance has recently experienced criticism. Banning (2005) recognises the economic value of transmitting factual information to a large audience, but also contends that there is no guarantee that effective learning will take place in such settings. Arias et al. (2016) have also questioned the effectiveness of the traditional lecture suggesting that as a pedagogical approach it is often ineffective because students' attention in passive listening settings is difficult to maintain for durations longer than 10 minutes. In the current practitioner research, the panel narrowly met the consensus agreement threshold for lecturing being commonly used in CBHE, achieving 75% agreement, with 25% of the panel asserting belief that the lecture was no longer commonplace. Interestingly, Yoder et al. (2021) surveyed undergraduate Chemistry teachers and reported a similar declining trend. Whilst 96% of the teachers have used lectures, only 83% intended to include lectures on future courses. As discussed previously, modes of learning in HE are changing with teacher-centered knowledge transmission being replaced or at least supplemented with student-centered approaches.

Following shifts towards more student-centered modes of instruction, the traditional lecture has begun to experience a paradigm shift. Traditional lectures are being redefined to engage students through interactive dialogue and student-centered knowledge sharing (Tuma, 2021; Evans, 2022). Tuma (2021) has argued that this approach can enhance educational outcomes. There is also evidence that students prefer a mixture of teacher-centered and student-centered approaches (Murphy et al., 2021). CBHE may be experiencing a specific paradigm shift of its own here. Whilst

lectures were only 75% prominent, 93.75% of the panel highly endorsed interactive lecturing as a common approach. Further investigation is required to understand the role and composition of the lecture in CBHE.

7.2 Interaction-based Approaches

The second category comprised interaction-based approaches; these require students to interact with at least one other person to undertake an activity. Almost all approaches in this category resembled student-centered activities. The consensus among the panel members observed here can be classified into two overarching themes, with a pronounced emphasis on group work/activities and discussion approaches being evident.

Group work such as cooperative learning and collaborative learning was prominently used by CBHE teachers each achieving complete consensus. Cooperative learning is a form of structured group work. It places strong emphasis on the interdependence of students working in groups with each student's contributions being linked or connected. Novice readers may appreciate this method in terms of each student's contributions acting as separate cogs in a chain. Gillies (2016) suggests that this approach promotes interaction amongst group members and teaches social skills needed for high-quality cooperation. Collaborative learning on the other hand is less structured than cooperative learning. Zhang and Cui (2018) define it as "set of instructional methods in which students are required or encouraged to work together to achieve a common learning goal" (p.378), rather than separate goals or tasks. Literature on the use of such methods in traditional HE teaching is varied and appears discipline specific. It is thus interesting that in this practitioner research, participants from all academic disciplines sampled unanimously agreed on their universal adoption. There is a need therefore to explore why cooperative and collaborative approaches are evidently commonplace in CBHE.

Another key point of consensus amongst CBHE teachers was related to approaches involving discussions. Discussion methods comprise small sized groups (often sized 2-4) interacting with each other to explore a particular topic directed by the teacher. Discussions are approaches which can promote softer skills such as communication, teamwork and listening. In the current study, teachers highly endorsed discussion methods ranging between 93.75% and 100% agreement. Some of the benefits of discussions include development of critical thinking (Arias et al., 2016; Abdulbaki et al., 2018), fostering of greater participation through active learning and long-term retention of information (Abdulbaki et al., 2018) and enhancing problem-solving skills through interdependent learning (Arias et al., 2016). Whilst literature pertaining to the prominence of discussions is limited, Asarta et al. (2021) have observed a rapid growth in the use of student-student discussions in Introductory Economics

programmes since 2000. In 2000, such discussions accounted for a median use of 6% of the class time compared to a median usage of 50% of the time in 2020. As such, it may be likely that other disciplines have experienced similar growth. Until now, the only exploration of discussion methods in CBHE teaching featured in Burkill et al. (2008) where discussions were noted as a less-common approach. More examination is needed on why these teaching approaches are now being used in CBHE.

7.3 Learning Through Doing

The panel of CBHE teachers agreed that 12 of the 13 approaches in this category were commonly used suggesting that a significant part of CBHE pedagogy may comprise learning through doing. Two key approaches which achieved complete consensus agreement were active learning and case studies.

Active learning has many forms but typically concerns methods which require students to adopt active roles as creators of knowledge, rather than being passive receivers as they may in the traditional, didactic lecture. According to Andrews and Lemons (2015), active learning pedagogy requires students to work on questions or problems specifically designed to facilitate the construction of conceptual understanding. Research suggests that active learning approaches increase student performance, for example in Biology (Haak et al., 2011) and STEM subjects (Freeman et al., 2014). Moreover, Freeman et al. (2014) concluded that students' exam results in active learning environments increased by approximately 6% compared to traditional lectures. Kay et al. (2019) suggests that HE teaching more widely is witnessing a shift towards active learning approaches. For example, Garceau (2012) reported that 80.9% of 165 undergraduate Biomechanics teachers were using active learning strategies. Active learning is well-researched in HE, yet until now its commonality has rarely been explored. The consensus reached in the current study suggests that it is a core component of CBHE teaching and learning; an area which may warrant future academic attention.

Case studies also achieved complete consensus. A plethora of research exists pertaining to the use of case studies as a teaching method in HE. It is therefore unsurprising that the expert panel agreed completely regarding its use more specifically in CBHE teaching. Case studies are a guided teaching approach that foster environments for students to construct their own knowledge (Bernardi & Pazinato, 2022). Whilst there exists some ambiguity around the origin of the approach, Farashahi and Tajeddin (2018) credit the Harvard Business School for its pioneering work in the early 1900s using real case studies to integrate theory with business problems. An array of benefits of case study approaches exist, for example, Andrews and Lemons (2015) claim that compared with lectures, case study teaching improves retention of conceptual understanding, development of reasoning, problem-solving and higher

order cognitive skills. Through case studies, it is claimed that students learn more by doing (Farashahi & Tajeddin, 2018). The current study strengthens the argument that case studies are a commonly adopted in HE teaching.

7.4 Tasks and Activities

This concluding category explores approaches designated as 'tasks and activities' which teachers may use in their pedagogical practices. In this category, just over half (57.14%) of the approaches met the threshold for consensus. Panel agreement was, however, exceptionally high for these eight approaches with six achieving complete (100%) agreement and two achieving 93.75% agreement. Some of these approaches were consistent with existing literature, for example, the use of flipped learning (Brewer & Movahedazarhouligh, 2018; Al-Samarraie et al., 2020) and mind-mapping which is akin to concept mapping (Daley et al., 2016; Machado & Carvalho, 2020) have been cited as effective HE teaching approaches. Self-assessment and quizzes also feature significantly in HE research studies but appear rooted in investigation of assessment, oppose to teaching approaches. The two empirical studies which have previously explored CBHE teaching approaches (Burkill et al., 2008; King & Widdowson, 2012) both cited practical activities as approaches that were commonly used and therefore panel agreement here strengthens existing knowledge. Conversely, panel agreement concerning the prominence of poster creation as a common teaching approach adds a new contribution to existing understanding.

Poster creation as a teaching approach appears to be a novel finding. According to Bracher et al. (1998), poster creation typically involves a "problem-focused activity which encourages relation of knowledge to a specific question of interest [to] stimulate demonstration of comprehension" (p 552). Whilst the use of posters has been explored in terms of assessment (Tanner & Chapman, 2012) and academic conference (Wallengren Lynch, 2018; Abd Aziz et al., 2022) contexts, its benefits as an instructional approach has seldom been investigated. It is, however, feasible that the benefits of poster creation and presentation for assessment and academic conferences may also apply to instructional practices. Wallengren Lynch (2018) assert that posters possess various pedagogical benefits including being effective scaffolding tools to support educational development and improve students' succinctness and clarity. Poster presentations are also cited as promoting critical thinking through limiting the available physical or digital space to display knowledge meaning that students need to develop skills in selecting which material to include or eliminate (Bracher et al., 1998; Tanner & Chapman, 2012). Though the literature exploring poster creation as a teaching approach in university-based HE settings is limited, this study's expert panel reached 100% agreement concerning the commonality of the approach in CBHE teaching and thus offers a novel contribution to the literature

as an area where delivery in the two settings may differ. Furthermore, this may be an example of a teaching approach derived from FE which has found its way in to CBHE delivery given the absence of this in HE literature.

8. CONCLUSION

This chapter has discussed data produced through an innovative Delphi study which is unique and transforms what we know about the under-researched area of CBHE teaching. The Delphi method adopted appears to be the first of its kind in college-based education in England. The findings present readers with a clear analysis of where the study supports, contrasts, or contributes new knowledge to existing literature. The study draws upon insights from experienced CBHE teachers stemming nine academic disciplines who reached a consensus agreement pertaining to 54 common teaching methods, strategies and tools which are used in CBHE practice. The chapter has provided practical insights into pedagogy which can arguably also be transferred to the wider college-based teaching context such as 14-19 programmes, adult education, and apprenticeship delivery. Furthermore, the findings identify key workforce gaps in knowledge and areas of less familiarity which may serve as a catalyst for college-based professional development activities.

Despite the expansion of knowledge which this study has contributed, more in-depth research is required. While the consensus agreement reached by the expert panel identifies common pedagogical approaches, it is recommended that future research investigates specific aspects of CBHE teaching in greater depth, such as the following:

- How and why novel approaches unearthed in this study (for example, questioning and poster creation) are used in classroom practice?
- What role and composition the lecture has in contemporary CBHE teaching?
- How interaction-based approaches are specifically used and why these appear to be highly common approaches?
- How CBHE teachers' awareness of emerging approaches is developed?
- How individual definitions of the teaching approaches differ and the impact of this on consensus disagreement?

REFERENCES

Abdulbaki, K. K., Suhaimi, M., Alsaqqaf, A., & Jawad, W. (2018). The Use of the Discussion Method at University: Enhancement of Teaching and Learning. *International Journal of Higher Education*, 7(6), 118–128. 10.5430/ijhe.v7n6p118

Abd Aziz, A., Vijayaratnam, P., & Vesudevan, M. (2021). The Utilization of E-Poster in Teaching and Learning. *Journal of Social Transformation and Education*, 2(4), 192–202.

Allen, J., & Parry, G. (2022). The bachelor's degree in college systems: History, evidence and argument from England. *London Review of Education*, 20(1). Advance online publication. 10.14324/LRE.20.1.26

Al-Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: A review of the evidence across disciplines. *Educational Technology Research and Development*, 68(3), 1017–1051. 10.1007/s11423-019-09718-8

Al-Taweel, D., Koshy, S., Al-Ansari, S., Al-Haqan, A., & Qabazard, B. (2022). Expert consensus for a national essential antidote list: E-Delphi method. *PLoS One*, 17(6), e0269456. 10.1371/journal.pone.026945635709136

Andrews, T. C., & Lemons, P. P. (2015). It's Personal: Biology Instructors Prioritize Personal Evidence over Empirical Evidence in Teaching Decisions. *CBE Life Sciences Education*, 14(1), ar7. 10.1187/cbe.14-05-008425713092

Arias, A., Scott, R., Peters, O. A., McClain, E., & Gluskin, A. H. (2016). Educational Outcomes of Small-Group Discussion Versus Traditional Lecture Format in Dental Students' Learning and Skills Acquisition. *Journal of Dental Education*, 80(4), 459–465. 10.1002/j.0022-0337.2016.80.4.tb06104.x27037454

Asarta, C. J., Chambers, R. G., & Harter, C. (2021). Teaching Methods in Undergraduate Introductory Economics Courses: Results From a Sixth National Quinquennial Survey. *The American Economist*, 66(1), 18–28. 10.1177/0569434520974658

Association of Colleges. (2020). *College Key Facts 2019/20*. Available at: https://www.edpol.net/wp-content/uploads/2022/01/2020-AoC-College-Key-Facts-2019-20.pdf

Association of Colleges. (2022). *College Key Facts 2022/23*. Available at: https://d4hfzltwt4wv7.cloudfront.net/uploads/files/AoC-College-Key-Facts-2022-Web.pdf

Avis, J., & Orr, K. (2016). HE in FE: Vocationalism, class and social justice. *Research in Post-Compulsory Education*, 21(1–2), 49–65. 10.1080/13596748.2015.1125666

Banning, M. (2005). Approaches to teaching: Current opinions and related research. *Nurse Education Today*, 25(7), 502–508. 10.1016/j.nedt.2005.03.00716140425

Barrett, D., & Heale, R. (2020). What are Delphi studies? *Evidence-Based Nursing*, 23(3), 68–69. 10.1136/ebnurs-2020-10330332430290

Bathmaker, A.-M. (2016). Higher education in further education: The challenges of providing a distinctive contribution that contributes to widening participation. *Research in Post-Compulsory Education*, 21(1–2), 20–32. 10.1080/13596748.2015.1125667

Beiderbeck, D., Frevel, N., Von Der Gracht, H. A., Schmidt, S. L., & Schweitzer, V. M. (2021). Preparing, conducting, and analyzing Delphi surveys: Cross-disciplinary practices, new directions, and advancements. *MethodsX*, 8, 101401. 10.1016/j.mex.2021.10140134430297

Bell, L., Strafford, B. W., Coleman, M., Androulakis Korakakis, P., & Nolan, D. (2023). Integrating Deloading into Strength and Physique Sports Training Programmes: An International Delphi Consensus Approach. *Sports Medicine - Open*, 9(1), 87. 10.1186/s40798-023-00633-037730925

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8–14. 10.1016/j.npls.2016.01.001

Bernardi, F. M., & Pazinato, M. S. (2022). The Case Study Method in Chemistry Teaching: A Systematic Review. *Journal of Chemical Education*, 99(3), 1211–1219. 10.1021/acs.jchemed.1c00733

Bond, M., Marín, V. I., & Bedenlier, S. (2021). International Collaboration in the Field of Educational Research: A Delphi Study. *Journal of New Approaches in Educational Research*, 10(2), 190–213. 10.7821/naer.2021.7.614

Bracher, L. (1998). The process of poster presentation: A valuable learning experience. *Medical Teacher*, 20(6), 552–557. 10.1080/01421599880274

Braun, M. (2023). Research skills modules for further education college based top-up degrees. *Research in Education*, 00345237231207715, 00345237231207715. Advance online publication. 10.1177/00345237231207715

Brewer, R., & Movahedazarhouligh, S. (2018). Successful stories and conflicts: A literature review on the effectiveness of flipped learning in higher education. *Journal of Computer Assisted Learning*, 34(4), 409–416. 10.1111/jcal.12250

Bullock, J., & Henry, G. (2023). Quality, community and access: An examination of student decision-making to study undergraduate degrees in two further education colleges. *Journal of Further and Higher Education*, 47(2), 280–296. 10.1080/0309877X.2022.2108692

Burkill, S., Dyer, S. R., & Stone, M. (2008). Lecturing in higher education in further education settings. *Journal of Further and Higher Education*, 32(4), 321–331. 10.1080/03098770802392915

Button, P., Collins, L. A., Denteh, A., García-Pérez, M., Harrell, B., Isaac, E., & Ziedan, E. (2021). Teaching controversial and contemporary topics in economics using a jigsaw literature review activity. *The Journal of Economic Education*, 52(4), 286–295. 10.1080/00220485.2021.1963373

Cooper, S., & Pearman, S. (2021). Is There Such a Thing as "Comparableness"? The Challenges Facing the EEs of Higher-Education Courses Delivered within Further-Education Institutions. In Sengupta, E., Blessinger, P., Ssemwanga, A., & Cozza, B. (Eds.), *The Role of External Examining in Higher Education: Challenges and Best Practices* (pp. 61–74). Emerald Publishing Limited. 10.1108/S2055-364120210000038005

Connolly, D., Dickinson, L., & Hellewell, L. (2023). The development of undergraduate employability skills through authentic assessment in college-based higher education. *Journal of Learning Development in Higher Education*, (27). Advance online publication. 10.47408/jldhe.vi27.1004

Daley, B. J., Morgan, S., & Black, S. B. (2016). Concept Maps in Nursing Education: A Historical Literature Review and Research Directions. *The Journal of Nursing Education*, 55(11), 631–639. 10.3928/01484834-20161011-0527783817

Dalim, S. F., Ishak, A. S., & Hamzah, L. M. (2022). Promoting Students' Critical Thinking Through Socratic Method: The Views and Challenges. *Asian Journal of University Education*, 18(4), 1034–1047. 10.24191/ajue.v18i4.20012

Diamond, I. R., Grant, R. C., Feldman, B. M., Pencharz, P. B., Ling, S. C., Moore, A. M., & Wales, P. W. (2014). Defining consensus: A systematic review recommends methodologic criteria for reporting of Delphi studies. *Journal of Clinical Epidemiology*, 67(4), 401–409. 10.1016/j.jclinepi.2013.12.00224581294

Djajalaksana, Y. M., Dedrick, R. F., & Eison, J. A. (2013). *Factors that Associate with the Selection of Instructional Strategies in Information Systems Discipline*. 2(4), 196-201.

Education and Training Foundation (2017). *College Higher Education Local Impact Summary (CHELIS) report 2017.*

Evans, D. J. R. (2022). Has pedagogy, technology, and Covid-19 killed the face-to-face lecture? *Anatomical Sciences Education*, 15(6), 1145–1151. 10.1002/ase.222436102494

Farashahi, M., & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *International Journal of Management Education*, 16(1), 131–142. 10.1016/j.ijme.2018.01.003

Fogo, B. (2014). Core Practices for Teaching History: The Results of a Delphi Panel Survey. *Theory and Research in Social Education*, 42(2), 151–196. 10.1080/00933104.2014.902781

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, 111(23), 8410–8415. 10.1073/pnas.131903011124821756

Gale, K., Turner, R., & McKenzie, L. M. (2011). Communities of praxis? Scholarship and practice styles of the HE in FE professional. *Journal of Vocational Education and Training*, 63(2), 159–169. 10.1080/13636820.2011.572175

Garceau, L. R., Ebben, W. P., & Knudson, D. V. (2012). Teaching practices of the undergraduate introductory biomechanics faculty: A North American survey. *Sports Biomechanics*, 11(4), 542–558. 10.1080/14763141.2012.72576423259243

Gillies, R. (2016). Cooperative Learning: Review of Research and Practice. *The Australian Journal of Teacher Education*, 41(3), 39–54. 10.14221/ajte.2016v41n3.3

Gov.UK. (2023). *Further education workforce.* Available at: https://explore-education-statistics.service.gov.uk/find-statistics/further-education-workforce/2021-22#dataBlock-115d10ac-f382-412d-1d72-08db8eaeaf03-charts

Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today*, 56, 29–34. 10.1016/j.nedt.2017.06.00228651100

Greenbank, P. (2007). From foundation to honours degree: The student experience. *Education + Training*, 49(2), 91–102. 10.1108/00400910710739450

Haak, D. C., HilleRisLambers, J., Pitre, E., & Freeman, S. (2011). Increased Structure and Active Learning Reduce the Achievement Gap in Introductory Biology. *Science*, 332(6034), 1213–1216. 10.1126/science.120482021636776

Harwood, D., & Harwood, J. (2004). Higher education in further education: Delivering higher education in a further education context—a study of five South West colleges. *Journal of Further and Higher Education*, 28(2), 153–164. 10.1080/0309877042000206723

Ingleby, E. (2019). It does more than it says on the tin! Problematising higher education in further education in England. *Studies in Higher Education*, 44(1), 20–30. 10.1080/03075079.2017.1333491

Iqbal, S., & Pipon-Young, L. (2009). The Delphi method. *Methods (San Diego, Calif.)*, 22(7), 598–600.

Kay, R., MacDonald, T., & DiGiuseppe, M. (2019). A comparison of lecture-based, active, and flipped classroom teaching approaches in higher education. *Journal of Computing in Higher Education*, 31(3), 449–471. 10.1007/s12528-018-9197-x

Keeney, S. (2010). The Delphi Technique. In Gerrish, K., & Lacey, A. (Eds.), *The Research process in Nursing* (6th ed.). Blackwell Publishing.

Keeney, S., Hasson, F., & McKenna, H. (2011). *The Delphi technique in nursing and health research*. John Wiley & Sons. 10.1002/9781444392029

King, M., & Widdowson, J. (2012). *Inspiring individuals: teaching higher education in a further education college. Exploring the pedagogy of HE delivered in an FE setting*. Higher Education Academy.

Lavender, K. (2020). College-Based Higher Education. In Tummons, J. (Ed.), *PCET: Learning and Teaching in the Post Compulsory Sector* (pp. 293–306). Sage. 10.4135/9781526481863.n22

Leigh, H. (2021). Signature Pedagogies for Art Therapy Education: A Delphi Study. *Art Therapy: Journal of the American Art Therapy Association*, 38(1), 5–12. 10.1080/07421656.2020.1728180

Lund, T. J., & Stains, M. (2015). The importance of context: An exploration of factors influencing the adoption of student-centered teaching among chemistry, biology, and physics faculty. *International Journal of STEM Education*, 2(1), 13. 10.1186/s40594-015-0026-8

Machado, C. T., & Carvalho, A. A. (2020). Concept Mapping: Benefits and Challenges in Higher Education. *The Journal of Continuing Higher Education*, 68(1), 38–53. 10.1080/07377363.2020.1712579

Marton, F., & Säljö, R. (1976). On qualitative differences in learning: I—Outcome and process. *The British Journal of Educational Psychology*, 46(1), 4–11. 10.1111/j.2044-8279.1976.tb02980.x

Mladenovici, V., Ilie, M. D., Maricuțoiu, L. P., & Iancu, D. E. (2022). Approaches to teaching in higher education: The perspective of network analysis using the revised approaches to teaching inventory. *Higher Education*, 84(2), 255–277. 10.1007/s10734-021-00766-9

Murphy, L., Eduljee, N. B., & Croteau, K. (2021). Teacher-Centered versus Student-Centered Teaching: Preferences and Differences Across Academic Majors. *Journal of Effective Teaching in Higher Education*, 4(1), 18–39. 10.36021/jethe.v4i1.156

Paul, R., & Elder, L. (2007). Critical thinking: The art of Socratic questioning. *Journal of Developmental Education*, 31(1), 36–37.

Rao, D., & Stupans, I. (2012). Exploring the potential of role play in higher education: Development of a typology and teacher guidelines. *Innovations in Education and Teaching International*, 49(4), 427–436. 10.1080/14703297.2012.728879

Rapley, E. (2014). Horses for courses, or a grumble in the jungle? HE in FE student perceptions of the HE experience in a land-based college. *Research in Post-Compulsory Education*, 19(2), 194–211. 10.1080/13596748.2014.897510

Rapley, E. (2019). Neglected spaces. Exploring connections between physical settings and pedagogic enablement and constraint of HE teachers in an FE college. *International Journal of Multidisciplinary Comparative Studies*, 6(1-3), 5–16.

Rees, E. L., Quinn, P. J., Davies, B., & Fotheringham, V. (2016). How does peer teaching compare to faculty teaching? A systematic review and meta-analysis. *Medical Teacher*, 38(8), 829–837. 10.3109/0142159X.2015.111288826613398

Simm, D., Marvell, A., Schaaf, R., & Winlow, H. (2012). Foundation Degrees in Geography and Tourism: A Critical Reflection on Student Experiences and the Implications for Undergraduate Degree Courses. *Journal of Geography in Higher Education*, 36(4), 563–583. 10.1080/03098265.2012.692075

Stigmar, M. (2016). Peer-to-peer Teaching in Higher Education: A Critical Literature Review. *Mentoring & Tutoring*, 24(2), 124–136. 10.1080/13611267.2016.1178963

Strafford, B. W., Davids, K., North, J. S., & Stone, J. A. (2022). Feasibility of Parkour-style training in team sport practice: A Delphi study. *Journal of Sports Sciences*, 40(20), 2327–2342. 10.1080/02640414.2022.215445936476316

Tanner, P., & Chapman, J. (2012). Poster presentations speak for themselves. *Language Teaching*, 36(3), 15–19. 10.37546/JALTTLT36.3-3

Tucker, C., Pedder, S., & Martin, G. (2020). The CBHE Lecturer Experience. In Kadi-Hanifi, K., & Keenan, J. (Eds.), *College Based Higher Education and its Identities: History, Pedagogy and Purpose within the Sector* (pp. 89–101). Palgrave Macmillan. 10.1007/978-3-030-42389-6_5

Tuma, F. (2021). The use of educational technology for interactive teaching in lectures. *Annals of Medicine and Surgery (London)*, 62, 231–235. 10.1016/j.amsu.2021.01.05133537136

Uiboleht, K., Karm, M., & Postareff, L. (2018). The interplay between teachers' approaches to teaching, students' approaches to learning and learning outcomes: A qualitative multi-case study. *Learning Environments Research*, 21(3), 321–347. 10.1007/s10984-018-9257-1

Vogel, C., Zwolinsky, S., Griffiths, C., Hobbs, M., Henderson, E., & Wilkins, E. (2019). A Delphi study to build consensus on the definition and use of big data in obesity research. *International Journal of Obesity*, 43(12), 2573–2586. 10.1038/s41366-018-0313-930655580

Wallengren Lynch, M. (2018). Using conferences poster presentations as a tool for student learning and development. *Innovations in Education and Teaching International*, 55(6), 633–639. 10.1080/14703297.2017.1286999

Yoder, R. J., Bobbitt-Zeher, D., & Sawicki, V. (2021). Understanding the Use of Student-Centered Teaching Methods in Undergraduate Chemistry Courses. *Research in Science Education*, 51(S2), 845–863. 10.1007/s11165-019-9820-5

Young, P. (2002). 'Scholarship is the word that dare not speak its name' Lecturers' Experiences of Teaching on a Higher Education Programme in a Further Education College. *Journal of Further and Higher Education*, 26(3), 273–286. 10.1080/03098770220149620a

Zhang, J., & Cui, Q. (2018). Collaborative Learning in Higher Nursing Education: A Systematic Review. *Journal of Professional Nursing*, 34(5), 378–388. 10.1016/j.profnurs.2018.07.00730243695

KEY TERMS AND DEFINITIONS

College-based Higher Education: College-based higher education refers to higher education programmes which take place in further education colleges. These programmes are mostly at undergraduate level, for example bachelor's degrees, higher national diplomas, foundation degrees, teacher education programmes or higher-level qualifications between levels 4 and level 6 of the Framework for Higher Education Qualifications in England.

Consensus agreement: Consensus agreement concerns the level of agreement that the participants in the study collectively reached based upon their ratings of how common the particular teaching methods, strategies and tools were. The level of agreement was measured in terms of a percentage and the percentage level set for this study for the participants to achieve consensus agreement was ≥75% of the panel offering the same rating (agree or strongly agree).

Delphi study: Delphi study refers to the methodology adopted in this study. This comprised an iterative multi-staged survey where participants offered open-text responses to prompts and indicated their agreement with answers offered using a 4-point Likert scale.

Expert panel: The term expert commonly used in Delphi research. It is a term to refer to the participants in the study. In Delphi studies, participants are typically selected based upon a pre-defined level of expertise which participants must meet to be considered eligible. In this study, various inclusion criteria were adopted, for example, participants were required to have a minimum of five years' experience of teaching in college-based higher education.

Student-centered approaches: Student-centered approaches are teaching practices based upon constructivist learning theories. In such practices, students adopt active roles in the learning process and the teacher typically adopts the role of facilitator, creating opportunities for students or engage with the taught content and construct shared meaning.

Teacher-centered approaches: Teacher-centered approaches are practices where the teacher is the main constructor of knowledge. Students are mostly passive recipients in the learning process with the teacher usually conveying information in a didactic manner.

Teaching approaches: There exists a lack of consistency around the phraseology of what a teacher does and what they implement. For example, terms such as teaching methods, strategies and tools are used interchangeably within the literature. The term 'teaching approaches' is used in this chapter as a collective term for teaching methods, strategies and tools to add consistency and simplify the narrative for the reader.