

SYSTEMATIC LITERATURE REVIEW OF 'HARD TO REACH' STUDENTS AND METHODS OF INCLUSIVE ENGAGEMENT

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Executive Summary

This systematic literature review of ‘hard to reach’ students was conducted as part of the REACT project (Realising Engagement through Active Culture Transformation). This report is available at www.studentengagement.ac.uk

The review was undertaken to provide a more rigorous understanding of the key issues and challenges to defining who ‘hard to reach’ students are, and draw out empirically proven good practice in methods to engage these students. It was funded by the Higher Education Funding Council for England (HEFCE) as part of the REACT Project to support the work of student engagement practitioners and the Higher Education sector in developing inclusive practice.

Context for the Review

The term ‘hard to reach’ has gained increasing traction amongst practitioners and policy makers in Higher Education in recent years. The HEFCE-funded REACT project was developed to specifically address the issue of how better to engage ‘hard to reach’ students, to make various practices more inclusive, to enhance student engagement practices, and to explore barriers students might face in accessing new opportunities. The term ‘hard to reach’ is not without controversy (McVitty, 2015), and experience of working with the REACT collaborative partners has shown that it is often conflated with other concepts (e.g. widening participation). Additionally, the term is often used in an uncontentious way or assumes shared knowledge which could mask any imbalances of power implicit in the term. To more critically assess ‘hard to reach’ and to bring some clarity to the use of the term; REACT has conducted a systematic review of the literature that makes use of the term in Higher Education, so as to add rigour and much-needed context to discussion in this area. This report also explores methods that have been used to explicitly engage those who are ‘hard to reach’, thereby developing a resource for practitioners who are working to increase inclusivity or better engage their students.

Key Findings

This review has shown that there is a lack of clarity around definitions of ‘hard to reach’ in Higher Education and other related contexts. In many cases this term is used as a stand-in for widening participation groups or other protected characteristics. The term has most commonly been employed when discussing students from low socio-economic classes (21 pieces) as well as Black and Minority Ethnic (BME) students (21 pieces). It is not simply the range of uses that contribute to this lack of clarity, but also that the third most frequent occurrence of the term was in literature with no definition of who the term was referring to. Given the potential for the term to be stigmatising and a range of complex power relationships and responsibilities under-pinning those viewed using this label, it is concerning that it is used with little justification or rationale. This is particularly an issue when assuming a shared understanding of who ‘hard to reach’ students are. The use of technology was the most common strategy suggested to overcome the issue of students being ‘hard to reach’, although a large number of the pieces featured in this review did not include any recommendations for how students should be reached. We recommend that the term is used with greater clarity, and that various stakeholders in Higher Education should base such labels on evidence.



Structure of the report

Section 1 explains the aims of our research questions and the methodological approach used in the systematic literature review to achieve this. It also discusses the literature review inclusion/exclusion criteria.

Section 2 provides an overview of the main findings from the review of 'hard to reach' literature. Findings are divided into two core themes: descriptions of 'hard to reach' and methods to engage these 'hard to reach' groups. Both of these elements from the literature will be discussed under the description provided.

Section 2 Descriptions:

- No definition
- Black and minority ethnic
- Low socio-economic class
- Young+
- Disabled
- Undereducated
- Cultural minorities
- Offenders
- Vulnerable or marginalised population
- Distance learners
- Low motivation
- Emotionally detached
- Mature students
- 'Gays and Lesbians'
- Single parents
- Commuting student
- Technology advanced students
- Hard to reach students outside of higher education

Section 3 of the report draws out implications of the findings from the systematic literature review and suggests improvements to be made.



1 Introduction

The REACT project was a two-year HEFCE funded project aimed specifically at understanding student engagement and the student experience of 'hard to reach' students. This programme has taken shape in several different strands; a formal research project looking at links between student engagement, retention and attainment; a collaborative development programme between 15 UK universities; and an investigation into the term 'hard to reach'. The REACT project was developed to specifically address the issue of how to better engage 'hard to reach' students, to make various practices more inclusive, to enhance student engagement practices, and to explore barriers students might face in accessing new opportunities.

The systematic literature review of 'hard to reach' students was a HEFCE success criteria for the REACT project. The review aims to better understand how the term 'hard to reach students' is used in existing research and literature. As this is a contentious and broadly applied term, this review aims to add rigour to any usage of the term as well as identify and share effective practices for engaging students outlined in the literature.

1.1 *Research questions*

- How is the term 'hard to reach' used within the literature?
- What students are defined as 'hard to reach students' and what processes are used to determine this definition?
- What effective strategies are identified for engaging 'hard to reach' students?

1.2 *Aims*

The aim of this review is to better understand what is meant when people talk about 'hard to reach' students. It is also intended that this literature review will provide greater clarity of how this label is being used and to identify good practice for engaging particular groups identified using this label. As developing good practice to engage 'hard to reach' students is a key focus of REACT, it was felt that greater clarity in how this term can be used, and how such students can be identified, was necessary for developing any such interventions.

1.3 *Methodology*

In order to capture the range of literature surrounding 'hard to reach' students in Higher Education, a range of 'Higher Education' search terms were used in conjunction with our differentiated key terms, 'hard to reach' and 'hard-to-reach', as both were prevalent in the literature. The Higher Education search terms we used alongside 'hard to reach', were used with the intent of narrowing the results to the relevant sector, given that this is a term that is widely used. These combinations are shown in Figure 1. These terms were searched on various search engine platforms, as also shown in Figure 1, to further ensure that the depth of the literature review covered a broad set of data from various institutional levels as well as from international sources. This approach ensured that we located literature from a wide range of outputs in order to gather a holistic view of what is being described as a 'hard to reach' student in Higher Education. The terms were generated by the project team through discussion with the REACT Steering Group, which features



representatives from practice, key sector bodies, students and the wider REACT team. This diverse expertise helped produce search terms that capture both a breadth of subject matter while remaining focused on relevant pieces.

Given the wide use of the term in other areas irrelevant to this review, a key challenge was the vast amount of literature produced by searches. In order to better focus the review on key areas, only the most successful combinations from the ERIC search (<https://eric.ed.gov>) were used for the Google Scholar searches. The search terms discounted from the Google Scholar searches are italicised in Figure 1. The discounted 'Higher Education' search terms were chosen due to the low number of yield from searching with them in ERIC, sometimes producing no results at all in the search combination. Originally it was presumed that a diversity of terms describing Higher Education itself would cast the widest net but this proved incorrect.

'Hard to reach' search terms	'Higher Education' search terms	Search Engines
'Hard to reach'	'Student'	Google Scholar
'Hard-to-reach'	'Higher Education'	ERIC database
	'Engagement'	Higher Education Research and Development
	'University'	Journal of Higher Education
	'Student Engagement'	Review of Higher Education
	<i>'Tertiary Education'</i>	Quality in Higher Education
	<i>'Post-Secondary Education'</i>	International Journal of Educational Research
	<i>'Higher Education Institution'</i>	Studies in Higher Education
	<i>'Higher Education Provider'</i>	Assessment and Evaluation in Higher Education
	<i>'Higher Education Institution'</i>	EPPI Centre
	<i>'Higher Education Provider'</i>	Journal of Educational Innovation, Partnership and Change
	<i>'Attainment'</i>	
	<i>'Retention'</i>	
	<i>'Attrition'</i>	
	<i>'Co-curricular'</i>	

Figure 1: Table of Literature Review Search Terms

The above combinations were searched and the literature that had titles and abstracts related directly to 'hard to reach' students and to Higher Education were saved.

The literature search produced 284 articles that had relevant abstracts and titles. Of the 284 articles that were found through the search terms, there were 57 pieces of literature that were not possible to access, subsequently these were removed from the final literature count. At this stage a total of 227 texts remained, these were further scrutinised to filter out the literature that was irrelevant to the aims of this review. Any texts which fell outside of the *inclusion criteria* (outlined in section 1.4), were discounted. During this process, 126 pieces were discounted because they did not meet the criteria. This left 101 texts that provide the foundation of this literature review. The included literature items were then qualitatively and quantitatively recorded to i) pull out the description of 'hard to reach' students; and ii) draw out whether the text suggested any methods to engage these students. A representation of the literature review process is shown in Figure 2.



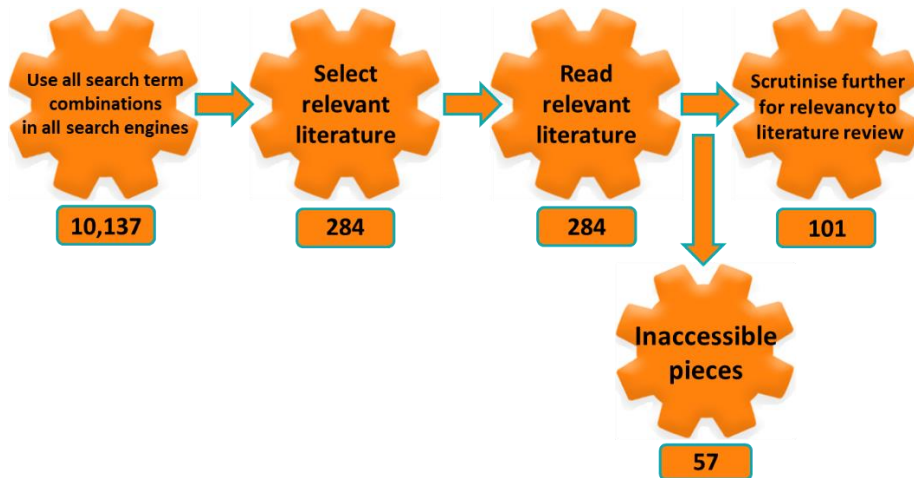


Figure 2: Literature Review Process

1.4 Inclusion criteria

In order to determine the literature that was included in our review, we set a number of inclusion and exclusion search criteria. The parameters set for the literature review ensured the selected literature was relevant to the aims of the review. The three criteria we set for the articles were the following

- A piece must discuss Higher Education;
- Pieces focused on widening access must relate to practice in Higher Education;
- Theoretical or opinion pieces must have some relevance to the student experience.

If the literature was outside these parameters, then a further scrutiny was undertaken. If the article was outside of Higher Education, the abstract must outline ‘hard to reach students’. This process is represented in Figures 3, 4 and 5.

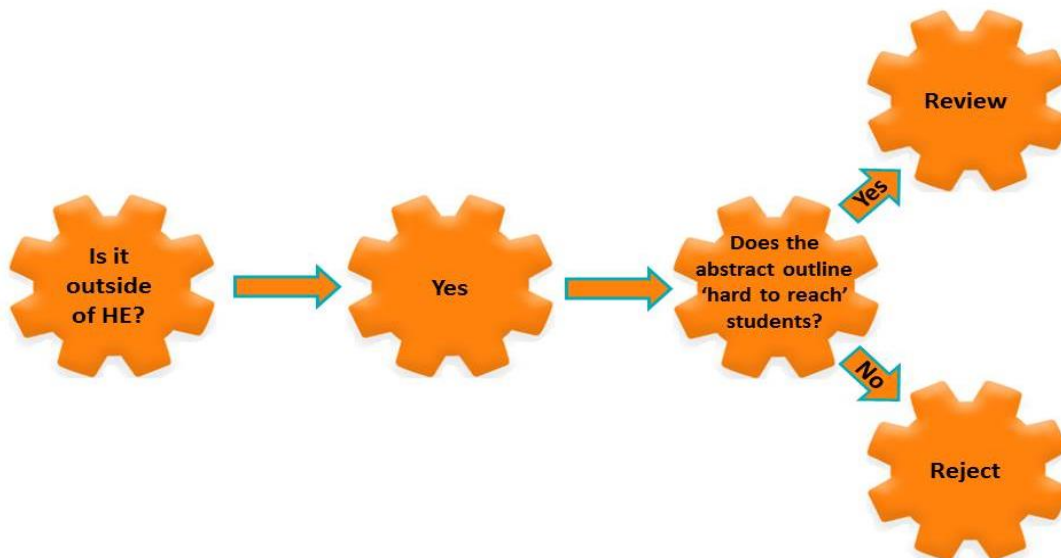


Figure 3: Inclusion Criteria One: Higher Education



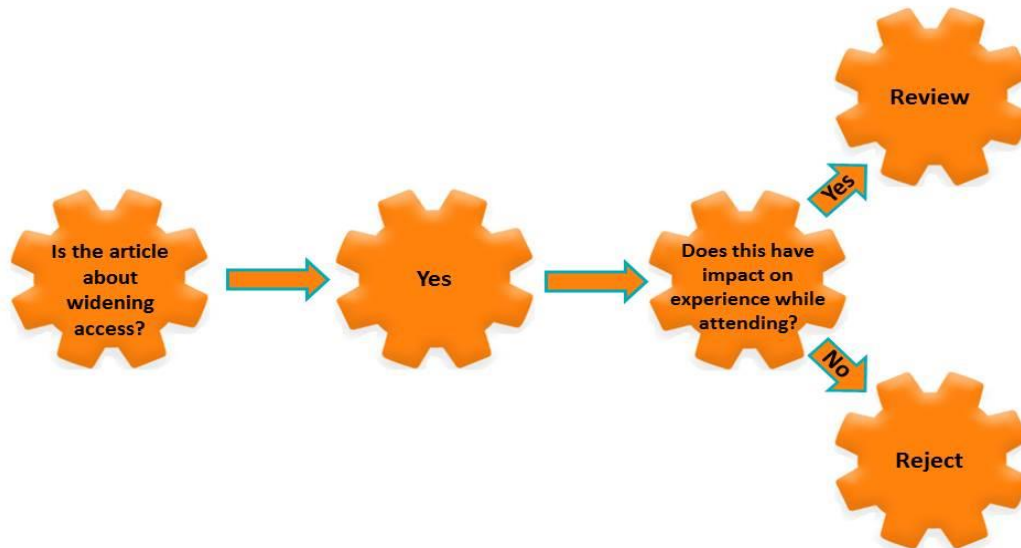


Figure 4: Inclusion Criteria Two: Widening Access

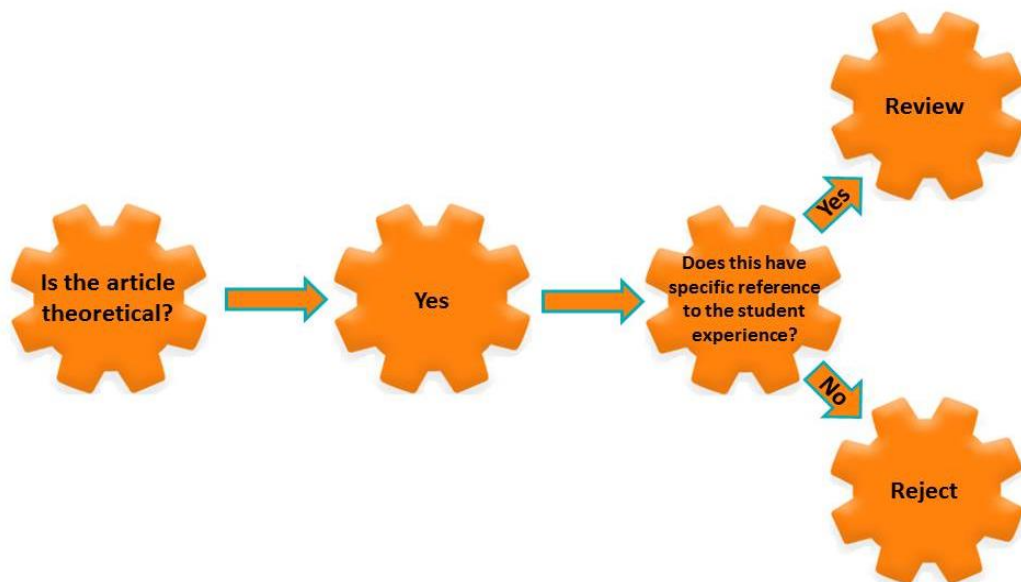


Figure 5: Inclusion Criteria Three: Theoretical

Once the articles were further scrutinised using the inclusion criteria, the remaining 101 articles in the final yield were analysed thematically to categorise their common descriptions of ‘hard to reach’ students. These categories were quantitatively measured for frequency of description and will be discussed in Section 2.

It is worth clarifying that it is not the intent of this review to determine empirically that a specific group actually is ‘hard to reach’, rather just to provide an overview of how this phrase has been used. As such, we have undertaken no scrutiny of the reliability or validity of the claims made by the various pieces reviewed here. This is particularly important as a number of sources included are from ‘grey’ literature or are specific to particular contexts. Any conclusions, including those



referring to strategies for engaging 'hard to reach' students, should be interpreted as advancing our understanding of how 'hard to reach' students are perceived within the Higher Education system rather than 'proving' that these groups are deserving of the label.

1.5 Considerations and challenges

The initial challenges and considerations for this literature review included the vast amount of literature given by search engines, with the combinations of search terms, alongside a significant time constraint for the research. This was particularly a prevalent issue when searching in Google Scholar, which would produce 1000 results for each combination and many of the results were from the selection of literature discussed in the common other uses 'hard to reach' section. Due to the number of results given per search, and the timeframe for completion of the review, only the most successful combinations from the ERIC search were used for the Google Scholar searches. The search terms discounted from the Google Scholar searches are italicised in Figure 1. The discounted 'Higher Education' search terms were chosen due to the low number of yield from searching with them in ERIC, sometimes producing no results at all in the search combination.

1.6 Other uses of 'hard to reach'

During the initial search phase of the literature review, a multitude of different uses for the term 'hard to reach' were found. The term 'hard to reach' is commonly applied to groups of people in varying contexts and sectors outside of HE which were not included within our search criteria. Such uses of 'hard to reach' include: parents of children, patients of HIV research, people with drug addiction problems, homeless people and people who identify as "homosexual". These uses were incredibly common, especially parents of children at primary school levels. The term 'hard to reach' was also often found in relation to medical journals (for both patients and staff) and for geographical use (hard to reach locations). Often the term 'at risk' was found to be used alongside the term 'hard to reach', suggesting there could be a comparative level to the use of these phrases (Russell, 2013; Calabrese, Hummel and Martin, 2007; Ecclestone, 2004; Mackenzie-Robb, 2007; Rudd and Zacharia, 1998).



2 Definitions

2.1 Introduction

The pieces that qualified for review produced 23 distinct uses of the term 'hard to reach', although these were not always distinct 'definitions' and even those that were often lacked a clear methodology or process by which this definition was arrived at. Figure 6 displays all of the different usages featured in the literature, these were thematically grouped during the reviewing process (i.e. 'black students' and 'BME students' both became 'Black and Minority Ethnic' students).

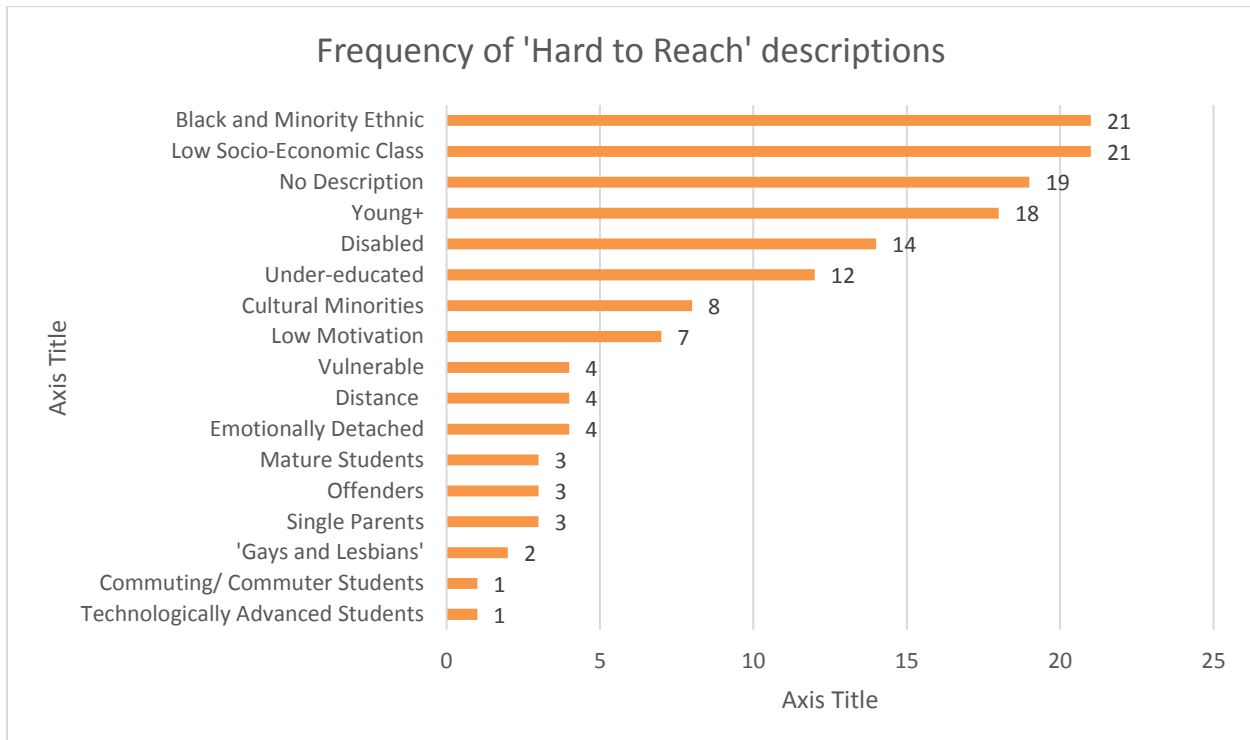


Figure 6: Frequency of Descriptions of 'Hard to Reach'

Figure 6 shows that the two most common uses of the term 'hard to reach' were around social class and ethnicity. We commonly also reviewed pieces that lacked any definition of 'hard to reach,' despite using the term. Many of these uses have over-laps with traditional 'widening participation' groups whereas others are highly context or process specific. The nature of these uses will be explored in the following sections. Equally diverse were the strategies defined to engage the 'hard to reach' as outlined in Figure 7 below. The relationship between the definitions of 'hard to reach' students and the methods suggested by the literature to engage them can be seen in Appendix 1.



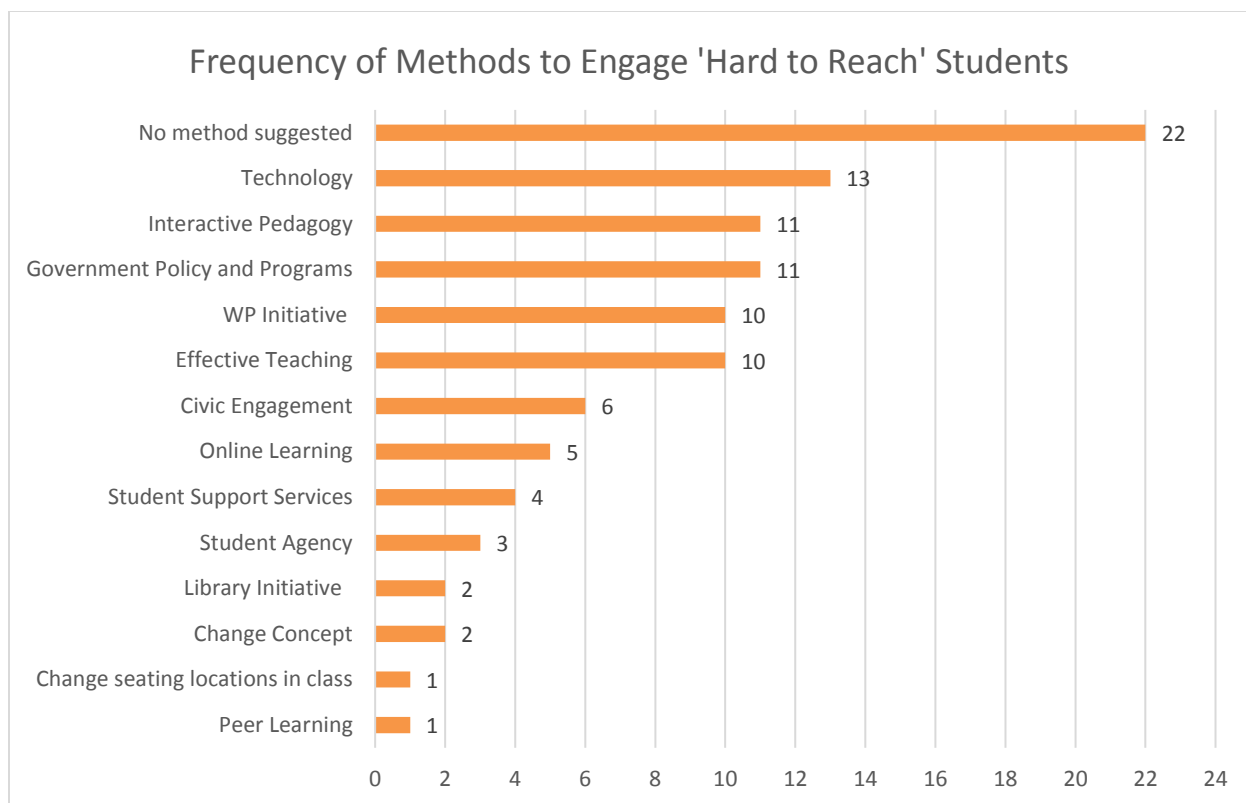


Figure 7: Frequency of Methods to Engage

As with the lack of clarity around definitions, most pieces that talked about engaging ‘hard to reach’ students did not suggest any clear method as to how they could be engaged. In many cases this would not be appropriate for the piece in question; however, it raises questions about how the term is used. The nature of the methods of engagement will be explored and related to relevant definitions in the following sections. We will also critically analyse the effectiveness and potential transferability of these methods.

2.2 *No Definition*

This section will discuss the texts reviewed that used the term ‘hard to reach’ but did not provide a clear definition as to what that means or how they determined it to describe a group of students. This was the third most common outcome of the literature review.

Abas and Mohd (2007) and Azizan (2010) both looked at the use of online learning to reach their ‘hard to reach’ students. Both of these articles do not offer a description of who these ‘hard to reach’ students are and therefore only offer a method. They examined the use of online learning in relation to Open Distance Learning (ODL) institutions around the world, specifically the Open University Malaysia (OUM). Azizan offers a definition of blended learning; ‘the primary goal of blended learning is to combine interactivity of instructor-led training, the flexibility of self-paced learning, and online tools for building a learning community’ (p.464). OUM utilize a blend of interactive print and electronic media to support-self learning (p.1) to reach ‘hard to reach’ students. Such examples of online learning they implement are i-Weblets, i-Tutorials and i-Seminars (p.7). All methods that they suggest for ODL consist of a balance between form



(dynamic and static) and process (low interaction and high interaction). They also make a significant point surrounding the importance of the teacher in ODL. They suggest that teachers themselves must be educated in using the OUM through processes of both physical and online learning courses (p.8). Azizan (2010) also contributes to the discussion surrounding the use of online learning at OUM by offering an evaluation of the benefits surrounding blended learning to reach 'hard to reach' students. These benefits include enhancing social interaction, communication and collaboration; offering flexibility and efficiency; extending the reach of education and its mobility and optimizing development cost and time.

De Freitas, Morgan and Gibson (2015) was another piece of literature that did not offer a description of who 'hard to reach' students are but have offered a method to engage them. De Freitas et al evaluate online learning that takes place on an international level through Massive Open Online Courses (MOOCs). MOOCs are primarily short learning courses that intend to reach large international audiences, which are mainly used to support and supplement learning. De Freitas et al state that the 'emergence of MOOCs may address widening participation and learning equity' (p.457) but they also point out the issues that may face these courses such as unengaged students, no accreditation and lack of peer and tutorial support. The article also mentions two adaptations of the MOOCs; cMOOCs and xMOOCs. The 'c' standing for the original constructivist heritage of MOOCs and the 'x' represents the more-modern version of MOOCs with a web home page and customisation (p.459). They suggest that the introduction of MOOCs and xMOOCs facilitates greater engagement for students and a direct shift from curriculum-focused learning to experience-centred.

Lapadat (2007) also does not describe her 'hard to reach' students, but offers online learning as a method to engage them. She investigates whether the shift towards online learning and communities and Higher Education is effective at reaching the 'hard to reach'. She argues that this has allowed teaching to shift its philosophy towards cognitive constructivism, which underpins some of the better educational practices (p.60). The article examines how online learning can undertake a community of its own, even though, on rare occasions, the students may never meet either their tutors or their peers. Lapadat studied the creation of this online community through producing an interactive forum that would allow students to write personal entries about their studies, which could then be commented on by their peers. These entries were not specifically formal as many occasions appear where she points out the informality of these responses and how they aided the creation of an online community (pp. 67, 70, 71-72). Lapadat concludes by stating that this new shift in constructivist approaches to online communities in Higher Education allows for high levels of engagement in studies (p.79).

Radovic-Markovic (2010) offers no description of 'hard to reach' students but rather compares the beginning of the online learning community in Serbia and the existing and well-funded system in the U.S. Radovic-Markovic (2010) examines the beginning of the e-learning community in Serbia by comparing it against the sector in the US. She explains that the reason why online learning has become so established in the United States is because of the investment that has been put into the sector. Additionally, she examines how online learning facilitates higher levels of female educational and career attainment through increased levels of flexibility in the learning process,



achieving a better balance between personal and other commitments (similar to Parke and Tracy-Mumford, 2000). This minimizes the cost of learning and students also gain a deeper sense of self-fulfilment. Importantly, however, she writes that online learning is becoming so important in education because employers are not distinguishing between students who graduate from 'Internet schools' and those who graduate from physical schools (p.297).

Colby, Ehrlich, Beaumont and Stephens (2003) also fall under this category as they do not offer a definite description of who their 'hard to reach' students are. They do sometimes allude to students who could find themselves disillusioned with the civic responsibilities of the world, such as volunteer work and politics. Due to the lack of actual definition and only a slight recognition of who the students they are trying to target are, this article will remain in the No Definition section. However, they do offer a method to engage, which is to increase the civic engagement of students. They aim to do this by 'weaving moral and civic issues into the heart of the curriculum' and this 'offers the best hope of connecting with the hard-to-reach students' (p.44). Additionally, Colby et al believe that institutions that "weave" these issues into the curriculum 'can make a profound difference in students' lives and in their capacity to contribute productively to the world' (p.42). They highlight an initiative called the American Democracy Product, which is supported by both the American Association of State Colleges and Universities and the New York Times. This initiative involves aiding 145 institutions in adopting a 'comprehensive approach to students' civic engagement' (p.47) Additionally, in their research project they examined that the 12 campuses that did address moral and civic development through intentional and holistic methods allowed their students to become more engaged with both civic and political issues and subsequently, engaged their 'hard to reach' students. Similarly, Bourner (2010), does not offer a definition for 'hard to reach' students, but also believes that Civic Engagement is the method to engage them. Bourner's article explores the relationship between student learning from community engagement (SLCE) and traditional University education (TUE). He explains that SLCE plays a significant contribution in developing students in regards to their social responsibility and employment skills, but that it must also work alongside traditional education to offer a well-rounded experience for the students.

Benneworth (2009) is another example of an article that does not offer a description of who the 'hard to reach' students are. However, he argues that universities have to engage more with 'hard to reach' communities. Subsequently, Benneworth develops a typology that had four main areas; research, knowledge transfer, service and teaching. However, there is one idea that underpins Benneworth's typology; the external stakeholder. He believes that by involving these stakeholders, universities would increase their relationship with these 'hard to reach' groups. Such examples of involving these stakeholders included opening university infrastructures and activities to the community, increasing publically funded projects to provide knowledge direct to 'hard to reach' groups and by exposing students through the course of their studies to the demands and needs of particular 'hard to reach' groups (un-paginated).

Kerka (1986) examines the barriers, or deterrents, to participating in adult education. Although this article has a set theme surrounding this, Kerka does not define who 'hard to reach' students are and subsequently has been placed in this section. She does however offer a method to



engage them; widening participation initiatives. She discovered that there a number of categories that create barriers for learners to participate; 'individual, family, or home-related problems; cost concerns; questionable educational opportunities available, negative perceptions of the value of education in general, lack of motivation and/or self-confidence, a general tendency toward non-affiliation, and incompatibilities of time and/or place' (p.2). These deterrents must be recognised and overcome to allow for 'hard to reach' students to access adult education. She states that there are various ways to remove different types of deterrents. To overcome negative attitudes and poor-self-concept, Kerka states that education needs to 'provide educational opportunities with low levels of risk or threat, reinforcement of self-concept, more positive personal experiences early in the educational career' (p.2). To overcome situational and institutional, they must offer 'alternative scheduling, extended hours for counselling, student services, transporting, child care and distance teaching' (p.2). Finally, Kerka believes that 'effective communication of accurate, timely and appropriate information about educational opportunities must be targeted to the particular needs, expectations and concerns of the intended audience' (p.2). If education systems can overcome these barriers, Kerka believes that adult education will become more accessible to her undescribed 'hard to reach' students.

Similarly to Kerka (1986), Mager (2002) examines the barriers to adult education. Although, she examines barriers to Further Education, she suggests that overcoming these barriers can also lead to reaching 'hard to reach' students in Higher Education (p.10). Like Kerka, Mager does not offer a description of who these 'hard to reach' students are but offers a method to engage them. She draws on a speech by David Blunkett in 2000, who states that colleges have to meet four objectives;

...high and improving standards for 16-19 year olds, providing the skills the economy needs at craft, technician and equivalent levels, widening participation in learning and enabling adults to acquire the basic skills and a ladder of opportunity to higher education. (p.18)

However, unlike Kerka, Mager examines the use of government policy and programs in removing the barriers to Further and Higher Education. She states that since Blunkett's speech, the government have begun to create Centres of Vocational Excellence (CoVEs) to provide the skills that are required to access this level of education. However, Mager also provides a way to improve CoVEs by increasing business support, providing basic skills, increased provision for 14-19 year olds and neighbourhood and community regeneration (p.18). The government's influence on this widening participation initiative, which involves CoVEs, has subsequently led this article to be included in the government policy and programs statistics.

Baert, Rick and Valckenborg (2003) do not describe who or what constitutes being a part of the 'hard to reach' group in education, however they offer a method to engage them; creating a positive learning climate with regard to lifelong learning. They contend that the term "learning climate" is ill-defined, if ever, but argue that it is attached to words such as 'safe, inspiring (didactically) challenging, new, positive, motivating, good, exploring, constructive, adequate, effective, convenient...' (p.89) and can be linked 'to the absence of the learner's inhibitions to



learning and learning barriers' (p.89). The positive learning climates' ultimate aim is to increase educational participation, but Baert et al admit that there are problems that can be encountered such as educational providers or teachers (p.102) ineffectively creating this climate. Subsequently, this method to engage has been categorised as effective teaching. However, Baert et al also openly admit that teaching and learning is a very subjective experience and each stakeholder in the educational process will bring and require different aspects of this climate to succeed and increase educational participation.

Thomas' (1990) article focuses on low-literate adults that are found throughout Canada. Although she does not use the term low-literate adults to define 'hard to reach', the literature is aimed at encouraging them to acquire literacy skills. Thomas claims that there is a massive problem in Canada surrounding its adult literacy rates and that adults are not attending programmes to fix this. She argues that there are some real issues that prevent adults from attending, such as geographical barriers, but for those who can attend, why are they not? She writes in order 'to reach potential learners there needs to be a variety of recruitment methods, a variety of learning situations in varied accessible locations with flexible scheduling, and a variety of learning materials and teaching methods, which focus on individual learning needs' (un-paginated). Therefore, Thomas' method to engage has been placed within the effective teaching category. The remainder of the paper mainly evaluates the best way to communicate to undereducated adults across Canada that these programs are available and worth it.

Kilgore, Griffin, Sindelar and Webb (2002) focus on changing teaching practices to reconstruct inclusive practice in schools. However, while not explicitly defining who their 'hard to reach' students are, there is a clear focus that these inclusive practices are aimed at disabled students. It is important to note that inclusive education does not only have to be about disabled children. As the article says itself 'inclusion...is not about children with disabilities - it's about whether educators are willing to accept responsibility for educating all students in a personalized and motivational way' (p.11) and therefore, effective teaching is seen as the method to engage the 'hard to reach'. They look at how Coral Springs Middle School (CSMS) changed their teaching strategies to take inclusion seriously. They discovered that 'it was the teacher's responsibility to find strategies that work for individual children' (p.7). They did this by stimulating student interest through revamping the parts of the curriculum that they were responsible for (p.8). They then made this new material more accessible to all students by adopting a variety of instructional strategies which included cooperative learning and peer tutoring (p.8).

In his 2000 article, Knox examines the continuum of professional education and practice. Although he does not define who 'hard to reach' students are, his article's overarching principle surrounds training to become effective teachers. He claims that this continuum can 'be strengthened by attention to relations among providers, as well as by research and evaluation' (p.20). This draws similarities with his 1987 article, which states teachers need to look outside of their institution and nation, to draw on best practice, to become better educators to engage the 'hard to reach'.

Velden, Naidoo, Lowe, Botas and Pool (2013) consider the use of the student voice in reaching 'hard to reach' students. This piece comes from a Quality Assurance Agency commissioned report



into Student Engagement in Learning and Teaching Quality Management, but falls in the group that offers no description of who 'hard to reach' students are. Their method to engage them however stems from the changing relationship between universities and their students. This changing relationship has led institutions to see students as stakeholders that can positively affect the student journey through researchers, co-producers and change agents. Universities have therefore attempted to engage with 'hard to reach' students by either engaging 'as many of the students they can reach...or...to understand student behaviour and opinions through analysis of data' (p.30). The increase of the student voice in institutions is being measured through an increase in student charters and their relevance to student engagement, engaging with professional services and overall institutional strategic planning.

Alsadaat (2009) presented a discussion surrounding how mobile learning can combine with University teaching to reach 'hard to reach' students. For Alsadaat, he believes that technology can benefit those 'who find it hard to attend classes on campus, and to traditionally 'hard to reach' or disadvantaged groups' (p.3). However, there is not a clear definition of who these 'hard to reach' students are other than being 'disadvantaged'. Although Alsadaat does not offer a description of who these 'hard to reach' students are, he does offer the use of technology as a method to engage them, specifically surrounding the use of mobile learning (M-Learning). He states that the utilization of M-Learning can benefit students greatly by allowing them to interact with each other and the practitioner rather than sitting behind large monitors. It is also easier to accommodate a number of mobile devices rather than desktop computers and tablets/PDAs/e-books are lighter and easier to transport than files/paper/laptop. In addition, it would be possible and easier to share assignments and work collaboratively, mobile devices can be used anywhere, they engage learners on a different level than a book would and it would combat the 'digital divide' as PDAs are traditionally less expensive than a desktop/laptop (p.5). However, Alsadaat also offers some considerations such as battery life, data usage, the pace of market change (leaving some things outdated very quickly), accessibility, the conceptual differences between e-learning and m-learning, personal and private information and content, screen size and key size (p.6-7 -it is worth noting this list is not exhaustive). The use of technology, especially M-Learning, has begun to be seen as not only providing educators with powerful tools but can also greatly enrich the learning experience for these 'hard to reach' students.

Foskett (2003) examines the use of foundation degrees in the UK HE sector to bridge the gap between Further Education and Higher Education. Although she does not offer a description of who the 'hard to reach' students are, she explains that foundation degrees were influenced by a change in government priorities surrounding widening participation in HE and the 'desire to make the sector work more closely with businesses to assist workforce development and modernisation' (un-paginated). Due to the government influence on the implementation of foundation degrees, this article's method to engage has been placed within the government policy and programs. Foskett also notes that the development of the foundation degrees can also be tracked back to the Report of the National Committee of Inquiry in Higher Education (1997). She draws on HEFCE to explain that the purpose of foundation degrees are to:



Equip students with the combination of technical skills, academic knowledge and transferable skills demanded by employers; provide a valued qualification in its own right; provide a qualification which will enable students to progress to higher academic and professional qualifications on the ladder of lifelong learning; combat social exclusion by providing a route into HE for groups currently under-represented; provide opportunities for students to study flexibly and to 'earn and learn'; become the dominant HE qualification below Honours level. (un-paginated)

She concludes by stating that at the University of Southampton, where foundation degrees have been implemented, that there are large amounts of students who are now studying that would not have had the opportunity without foundation degrees and resulting relationship between FE and HE.

Sebold (2008) is one of the three articles in this literature review that offers neither a description of 'hard to reach' nor how to engage them. His article however investigates the theories of Vincent Tinto who states that 'if students are engaged, they are more likely to matriculate through college and ultimately graduate' (p.14). Additionally, this has led university administrators to believe that student engagement will be rewarded with "robust" graduating classes. Due to its link between retention and engagement, we included this article in the review but its utility is limited for our aims.

Bemak (2005) is also one of only three articles included in this literature review that offers neither a description of 'hard to reach' nor a method to engage them. This piece of literature offers a discussion and critique of the Empowerment Groups for Academic Success (EGAS). The EGAS approach 'requires operationalizing the multicultural counselling competencies and working towards true empowerment and social justice' (p.401) Bemak argues that society is a critical moment and we must 'rethink our ways of working with high-risk students and move past old paradigms' (406). It is worth noting that this article does not explicitly say that EGAS is a method to engage 'hard to reach' students rather than a general pedagogical shift.

Frerichs and Adelman (1974), similar to Bemak (2005) and Sebold (2008) is the last of the three pieces of literature included in this review that does not offer a description of 'hard to reach' or a method to engage them. This piece looks at the effect on classroom dynamics if a cohort of students is negatively labelled before their prospective teacher meets them. Frerichs and Adelman also carried out a control group in which the teacher was told their students were 'normal'. The prospective teachers were then shown each class via videotape and asked to talk about what they thought of the classroom groups. They found that the teachers who were told the negative connotations of their students perceived them in that way rather than the control group who perceived them in a 'normal' way.

2.3 Black and Minority Ethnic

Black and Minority Ethnic (BME) was codified using a variety of key themes that appeared throughout the 101 articles. This definition included articles that used terms such as 'ethnic minorities' and 'black people'. This codification aimed to cover both non-white ethnic groups and



those from white minority ethnic groups. Of the 101 articles that were placed into the review, and not rejected, 21 articles described Black and Minority Ethnic people as 'hard to reach'.

In 2010, Wishart and Green explored whether the emergence of mobile technology can support 'hard to reach' students from the multi-ethnic Southampton community and also those who speak English-as-a-second language (ESL). In line with other examples in this literature review, ESL has been codified as Cultural Minorities. Similar to other articles that mention the use of M-Learning as beneficial to reaching these 'hard to reach' students, Wishart and Green believe that 'mobile devices afford particular learning opportunities' (p.27). However, they also state that there are problems with adapting this emerging type of pedagogical platform for these 'hard to reach' students, such as resistance to change from lecturers, cultural barriers, security and privacy concerns. On the other hand, Wishart and Green also offer a range of benefits to adopting technology and M-Learning, such as: creating an online repository accessible by different browsers according to the device at hand; the merging of personal vocational information and practice; subject specific opportunities; peer-to-peer networking and collaboration; and creating/adopting an approach to teaching and learning that is more collaborative than didactic (p.23-24). Wishart and Green believe that if both the HE and FE institutions in Southampton can overcome the barriers noted above, then these 'hard to reach' BME and cultural minority students can become easier to 'reach'.

Kinard and Bitter (1997) examined the 'Hispanic Math Project' (HMP), a project that focussed on improving the mathematical skills of 'hard to reach' students. For Kinard and Bitter, they do not explicitly state who these 'hard to reach' students are, but imply that they are from racial or ethnic minorities (p.77). The HMP uses visual animated-graphics to assist in the teaching of simple mathematical problems such as;

- *Arbitrary units*
- *Scaling and maps*
- *Perimeter and area of a rectangle*
- *Volume of a solid figure*
- *Time*
- *Money (p.78)*

Overall, the teachers believed that the use of this technology was a success, reporting high levels of satisfaction and effectiveness of the multimedia tools. They further state that 'multimedia computer-assisted instruction appears to be an effective and motivating method of mathematics education for children from diverse multicultural populations' (p.86). Although this article is solely focussed on the implementation of the HMP for children, Kinard and Bitter do believe that a strong foundation in mathematics can not only ensure that these 'hard to reach' students are not precluded from Higher Education, but also from careers in technology, science and as future educators and subsequently are mentioned in this literature review.

Renzulli and Reis (2007) also described their 'hard to reach' students as those from BME backgrounds, especially African American children and teenagers. They discuss how people from low socioeconomic class areas have a tendency to also fall under the 'hard to reach' umbrella. They argue that the use of online learning and internet access in the home positively affects



academic performance of these 'hard to reach' groups and subsequently this led to the invention of the Renzulli Learning System (LRS). The LRS was created at the University of Connecticut's Neag School of Education with the aim of allowing teachers to feel as though they have multiple teaching assistants in the room with them, which enabled them to tackle barriers faced by 'hard to reach' students. The system 'combines computer based strength assessment with search engine technology' (p.2), which aims to match up resources to individual strengths. The LRS is built upon the Enrichment Triad Model, which attempts to develop skills involving 'problem finding and focusing; stating research questions; task understanding and planning; identifying appropriate investigative methodologies; searching, skimming, selecting, and interpreting appropriate resource material; identifying appropriate outlets, products, and audiences; and preparing effective communication vehicles' (p.7). The underlying principle of the RLS is, however, to improve 'student engagement which in turn results in higher achievement, improved self-concept and self-efficacy' (p.8).

Craciun and Associates (1991) offer a multitude of descriptions for 'hard to reach', which includes 'Native Americans, homosexuals, poor people, the disabled' (p.199) and 'illiterate residents, non-English-speaking residents, single working parents, people working two jobs... and are low-income' (p.184). This draws similarities to Wagg (2013) in which they describe 'hard to reach' with more than five different descriptions. Craciun and Associates endeavoured to develop ways of educating and training the multicultural population of this area through the Winning with Stronger Education project (WISE). The WISE project was a multi-staged research project that consisted of a mail survey, personal interviews, telephone surveys, focus group sessions and qualitative research with these 'hard to reach' residents. They discovered that two-thirds of the 'hard to reach' group would be more likely to spend more on education if they knew where the money was going and that they valued education highly. This issue was conflicted further because members of these racial and ethnic minorities struggled to see themselves participating in education, due to the racism and racial bias that spanned from students to business employers. They also discovered that teachers felt like resources were misallocated and insufficient, an issue that needed to be fixed to encourage these 'hard to reach' groups to come back to education (this draws similarities with Calabrese et al (2007). However, the broader generalisability of this article is more questionable due to its highly specific context, which is based around education in one area of Anchorage, Alaska. Due to its similarities with other articles and its agenda of widening participation in Anchorage, this article has been included.

In 1993, the Department of Education in Washington DC published a teaching guide for teachers, which aimed to help limited-English-proficient migrant students. The extensive use of the term 'migrant' makes this article relevant to Cultural Minorities. The guide consists of many exercises that aim to increase the English proficiency of these migrant students who most likely have English-as-a-second language (ESL). The guide is summarised below:

- 'Academics- basic skills, enrichment (e.g., field trips and cultural events), English-as-a-second language (ESL) instruction, placement options (home-study, residential, or commuter programs), and general educational development (GED) preparation;



- Vocational training- career awareness, job placement, post-employment counselling, and vocational courses;
- Support services- child care, counselling and referral to social service agencies, self-concept development, stipends and transportations' (p.149)

If institutions can offer these support and educational services to their migrant students, the Department of Education believes that they can combat high levels of dropouts in their institutions and improve the system dramatically. Even though this article is heavily influenced by a government agency, it is not seen as a policy or program, but rather an initiative to widen participation and education for these 'hard to reach' students.

Watt's (2016) paper on engaging 'hard to reach' families draws comparisons to Mapp's (2002) on paper on a similar theme. However, alongside Mapp's definition of 'hard to reach', which is children and families from low socio-economic class, Watt also adds people from ethnic minority groups can be deemed 'hard to reach' (p.32). Furthermore, Watt states that that the 'hard to reach' label tends to be handed out to these groups as parents are 'less likely to engage in their children's education' (p.32). She does however also offer a more defined description of what constitutes 'hard to reach' families, rather than if they are from a low socioeconomic class or BME background, when she states that the schools she investigated have a 'high proportion of pupils receiving free school meals (FSM pupils), thus belonging to lower socioeconomic class families that might be labelled 'hard to reach'. (p.32). Watt in her article also offers five 'strategies' that can bring these 'hard to reach' parents into their 'hard to reach' children's education. The first of these strategies was to regularly invite parents into school; one of Watt's interviewees stated that:

...we did a lot of... lightweight type workshops where we'd invite them in to make a Christmas cracker, come and make a Christmas card with your child...now parents are more than happy to come into school (p.38)

The second strategy was to teach parents how to reach. This strategy ultimately aimed at having parents inside the school and educating them on how they could better educate their children at home. Some of the schools that Watt investigated offered formal workshops on increasing their parental teaching skills. The third of five strategies was to educate parents to increase aspirations. This strategy involved educating the parents themselves through working closely with a local college that provided life skills such as numeracy and literacy. The fourth: regular communication between school and parents. This strategy was based upon staff feedback on the 'importance of keeping parents well informed regarding their children's education, both at the school level...and in terms of their own child's progress' (p.39). Alongside the fourth strategy, Watt suggests that friendly, caring and firm communication must be the fifth strategy to engage parents in their children's learning. This strategy ensures that teachers and the school talk to the parents in a way that does not complicate understanding the learning process through extensive use of jargon or simply the way teachers would talk to the parents. It is important to realise, however, that similar to Mapp, Watt draws an overarching link between parental engagement in their child's education when she states that 'some studies show how parental engagement with younger pupils can have a long-term impact upon attainment levels, affecting entrance into higher education' (p.33). This



text offers a practical checklist that schools can utilize to widen participation of both parents and children in their education and has subsequently been placed in the widening participation to Higher Education category for methods to engage.

As previously stated, Calabrese, Hummel and San Martin (2007) use the term 'at risk' alongside 'hard to reach'. They explain that 'students who have minority status or have origins in a low socio-economic environment have been more at risk ... than students from dissimilar backgrounds' (p.276) while also drawing on Kerka to summarise 'at risk' students as 'minorities, poor and low-achieving' (Kerka in Calabrese et al, p.276). Alongside their definition for 'at risk' or 'hard to reach' students, they also contend that 'resources in rural areas are limited for support unless at-risk students fall under Title I [schools or local educational agencies that receive financial assistance from the government because they have a high percentage of children from low income families] or are non-English speaking' (p.276). Subsequently, they argue that there must be a basis to improve at-risk student achievement through 'instruction, programs and resources' (p.280). In their research study, they discovered that 'when teachers were not blaming at-risk students, their parents, or the home environment, they blamed the lack of available resources or each other' (p.287). Additionally, they uncovered that 'teachers linked student motivation to the need for additional resources' (p.284). However, they also found that 'administrators found it difficult to identify with teachers regarding resource priorities' (p.284). Due to its focus surrounding increasing resources to widen participation in education for these 'at-risk' students, this article has been included.

Vicars (2011) similarly describes BME students as part of the 'hard to reach' group, however he also states that students from Low SEC also constitute this group. He explains that arts-focused education can 'engage members of lower socio-economic, small minority ethnic and otherwise 'hard to reach groups' in ways that more conventional educational organizations and state agencies had often found extremely difficult' (p.61). Vicars believes that a shift towards arts-based pedagogy can react to 'at risk' behaviours quicker than traditional methods and subsequently can create 'teachable moments that promote participation in form learning' (p.60). For arts-based pedagogy to be successful, it must be built upon six key themes; 'trust/security, freedom of action, variation of contexts, the right balance between skills and challenges, interactive exchange of knowledge and ideas and real world outcomes' (p.68). Similar to Peter's (2009) drama based pedagogy, Vicars argues that interactive, arts-based pedagogy can prepare students for the outside world, stating that education is 'not solely experienced within the margins of institutional walls' (p.68). As there are similarities between Peter (2009) and Vicars pedagogy, such as emphasis on interactivity and preparation for the outside world, this article's method to engage has also been coded as interactive pedagogy.

In 1986, Peterson and Strasler demonstrated how recent Government Policy and Programs assists in engaging students who were 'hard to reach' in South Carolina schools. They explain that the 'hard to reach' students in these schools are both 'minority children' (p.1) and 'children who often are at-risk of experiencing problems in the schools (i.e., low-income, minorities, disadvantaged and "handicapped")'. Therefore, this article is featured within three different sections; BME, Low SEC and Disabled. Peterson and Strasler state that 'black children make up



almost 40% of the State's public school enrolment' (p.2). To engage these students, Peterson and Strasler outline and examine some of the government policy and programs that have been implemented into these schools. These policies are;

- a. Reduction in class size in grades 1-3 in reading and math from 30 to 1 to 21 to 1;*
- b. Provision of certified music, art and physical education teachers in elementary schools;*
- c. Expansion of all handicapped programs;*
- d. Expansion of vocational programs;*
- e. Assurance of at least a state minimum teacher salary schedule adjusted for inflation; and,*
- f. Increased accountability at the school and district levels. (pp.3-4)*

Furthermore, they also state how the district combatted dropping kindergarten rates by dropping 'the mandatory school age from 7 to 6 and made kindergarten and transportation to kindergarten mandatory available on request' (p.4). This reform helped students from 'hard to reach' families access much-needed education at early years. Additionally, Peterson and Strasler argue that the states that are beginning to enact major reforms will positively affect student standards for 'promotion, graduation or entrance into college' (p.25) or Higher Education. At the time of this report being published, it was unknown whether these policy and programs would be successful, but Peterson and Strasler also state that 'expectations, curricula and instruction will have to be improved if the early gains in achievement are to be maintained' (p.29).

For Brooks-Wilson and Snell (2012), the term 'hard to reach' 'may include those experience disabilities, some ethnic minority groups, and those who do not speak English as a first language' (p.5). Interestingly, they analyse how changing the conceptualisation of 'hard to reach' can be a method to engage students who are under-represented. The literature examines that how some groups who are still neglected from commonplace discussions surrounding pupil engagement are willing and eager to contribute their unique experiences. Consequently, they contend that rather than using the term 'hard to reach', we need to start using the term 'accessible when approached' (p.17). This change in conceptualization stems from the belief that these students with unique circumstances are willing to engage when they are approached rather than them actually being 'hard to reach'. However, they do understand that this terminology raises questions about what the 'appropriate approach' (p.17) may be, such as making sure that the impetus is on the researcher rather than the researched.

Bhattacharyya, Ison, Blair and Maud (2003) highlighted 'minority ethnic groups' as a group that is given particular attention in a majority of Sure Start programmes that make provision for 'hard to reach' groups. Whilst providing an example of a group that is described as 'hard to reach' and given particular attention, the article does not provide an extended definition for the term 'hard to reach' or what makes someone 'hard to reach'. They state that 'Sure Start is a national, cross-government initiative that aims to improve the health and well-being of families and children before and from birth, particularly those who are disadvantaged' (p.6). Subsequently, Sure Start is not directly associated with educational provision and therefore this article has been placed within the 'no method to engage' section. Additionally, even though this article focuses on the Sure Start programme, it contains a section that highlights the importance of how a good start in life and the education system can benefit students in the long term in reaching Higher Education.



In their article entitled 'The student experience and subject engagement in UK sociology: a proposed typology', Jary and Lebeau (2009) outline the difficulty of qualitative studies in reaching the 'hard to reach'. Without giving a further outline of the groups that are difficult to reach in qualitative studies the article explores 'non-traditional' students who have been under-represented or come from low socio-economic and ethnic minority groups. However, Jary and Lebeau do not offer a method to engage these 'hard to reach' students.

Townsend (2013) examines whether the ethnography of communication (EC) is a useful tool to engage students who are deemed 'hard to reach'. She claims that reaching these groups of students is a complicated problem and that they consist of students who are from 'low-income and minority populations' (p.203). Townsend believes that EC allows researchers to approach 'hard to reach' people as people, rather than as demographic "representatives" (p.203) and that through doing this, the researcher can gain a greater understanding of why people are not participating in activities. Although Townsend mentions that EC is a useful framework for civic engagement, her article is based around how to research the problems that these populations face, rather than engaging them, and subsequently has been placed within the no method to engage statistics.

Ardt, Hastings, Hopkins, Knebel, Loh and Woods (2005) produced a report on Primary Education in Bangladesh. Although this does not directly relate to 'hard to reach' students in HE, Ardt et al explain that it 'may be possible to measure the success of primary education systems by inspecting how many students go on to higher education' (p.18). Although, this article does not offer a distinct method to engage these 'hard to reach' students, Ardt et al do describe them when they write that 'many of the hard-to-reach communities are ethnic minorities' (p.16) and therefore this article has been coded as BME.

Bidgood, Saebi and May (2006) examine the influences on student withdrawal from a FE College in England. Although in the article Bidgood et al do not explicitly say that certain people are 'hard to reach', their article does have an overarching impetus that these groups are those from both BME and Low SEC backgrounds. Additionally, this article is merely research based and only explores the statistics of dropouts from this FE institution, rather than offering a method to engage them and keep them in the college.

Wright (2013) investigated black academic attainment through conducting a study that explored the ways in which 'young black people resist and work to transform their negative school experience' (p.93). Her research cohort was brought together by utilizing the snowball sampling method, which included 'contacts with the African Caribbean community groups, black organisations, supplementary schools and the black church' (p.92). She claims that her research has shown that 'black children are being viewed as an 'educational problem' and a threat to the educational standards of the white community', which is leading to an increase in educational segregation (p.98). However, she also discovered that 'black students are disproportionately more likely to go on to higher education' than their white counterparts, which suggests that cultural and economic capital 'do not determine access to higher education' (p.98). Although her research



project has discovered many issues with black academic attainment in the UK, she does not offer a method to change this and engage these young black 'hard to reach' students.

Another piece of literature that defines 'hard to reach' students as those from a BME background is Makkawi who wrote in 1999 that 'students' ethnic identity must be recognized and celebrated in order to create equal opportunities for achievement and success' (p.2). The article explores how the next generation of teachers must be prepared to work in a multicultural society and must recognize and celebrate social diversity in their classrooms. However, Makkawi does not offer a method to achieve this, stating that it would be 'premature to make pedagogical recommendations based on this limited case study' (p.5). Therefore, this article has been placed within the no method suggested frequency.

Pearce (1999) is another example of an article that does not explicitly define who their 'hard to reach' students are, but she discusses ethnicity and race in relation to health education and physical activity. Pearce is also another example of literature that does not offer a method to engage these students. Similar to Mitchell et al (2015), she does explain why these students do not engage in physical activity when she states that 'limited participation in physical activity among non-dominant racial and ethnic groups is caused by; among other factors, cultural, linguistics and accessibility barriers' (p.28).

It is worth noting that of the 21 articles that described 'hard to reach' as being related to Black and Minority Ethnic (BME) eight also mentioned and highlighted low socio-economic backgrounds.

2.4 Low Socio-Economic Class

While it may be subject to a diversity of metrics or definitions that can be equally as ill-defined as the term 'hard to reach', a significant category of literature was broadly centred on the idea of social class. This is often categorised using various stratified categories such as NS-SEC (Office for National Statistics 2010). We have selected the label of Low Socio-Economic Class (Low SEC) for this category. Any greater level of definition will be explored in the discussion of particular themes.

Loveday (2015) does not explicitly describe who 'hard to reach' students are; however, the article is focused on how those from a low SEC are often used as the description of 'hard to reach'. She avoids stating that low SEC people are 'hard to reach', arguing that labelling these groups 'acts to produce certain groups as problematic, whilst downplaying the wider structural causes' (un-paginated). Loveday examines the relationship between working-class participation in HE and social/cultural mobility. Through this examination, she contends that the problem with 'hard to reach' students is the term itself and therefore we need to change its conceptualization to engage these students. She draws on a student, Joe, to explain the problem from the eyes of the "labelled":

And I've said to you loads of times, when we hear of people working in the fields we work in ... sneering at so-called chavs ... and then wonder why we don't go running to them to represent us and then have the audacity to sort of go away and debate why



we won't work with them, why we won't encourage it, and they call us 'hard to reach', you know what I mean? And like we've said before time and time again, we ain't hard to reach, it's them who are not doing their job properly ... if you need to read the latest bit of research to find out how to engage with working-class people, you should be doing something else. (un_paginated)

She draws on writers such as Ranci re and Bourdieu to state that the issue with the sector is that the government believe that going to a HE institution constitutes upwards social mobility. This needs to change alongside the terminology to reach the 'hard to reach'.

Payne and Lyman (1996) offer multiple descriptions of 'hard to reach'. They argue that students who come from low SEC, students who are 'non-traditional' and 'underprepared' constitute their depiction of 'hard to reach'. These three terms combine into 'under-educated' for their article, which explores how developmental programmes are used to support 'under-educated' K-12 students in the United States before the turn of the millennium. They argue that the aims of the education system are too 'idealistic or dangerously unrealistic' (p.14) and that this either saves or destroys America. Developmental programmes such as classes, study skills courses, tutorials and counselling programmes are often underfunded due to the scarcity of research funding and the diversity in the programmes themselves (p.15). These programmes were aimed at educating the underprepared students in college that came from the late 1960s and early 1970s baby boom. The aim of these developmental programmes was to involve colleges in "levelling out" the educational field, making sure that those students who come from underprepared and low socio-economic classes are educated to a 'real college-entrance standard' (p.17), which would subsequently lead to an improved education system in the U.S.

Hossain (2014) explores how Bangladesh can improve its access to education for its poorest populations. Contextually, Hossain states that at the time of writing her article there had been little effort invested in "expanding access for geographically, ethnically and socially marginal groups" (p.14). Although, she also contends that 'there have been recent efforts to improve access for these marginalised groups through innovative forms of schooling (such as the Hard-to-Reach programme that targeted urban working children)' (p.14). Due to the mention of 'urban working children' and the title of the article surrounding poor residents of Bangladesh, this piece of literature is relevant for both the Young+ (see 2.5 below) and Low SEC categories. Although the majority of Hossain's literature is focussed around access to education for young pupils, she draws a comparison between access to education and its subsequent 'domino' effect into Higher Education through increased public sector investment (p.13). Hossain claims that this expansion was 'driven by a succession of political and administrative leaders who pushed education policy reforms, including a series of national political leaders' (p.21). By expanding the education system in Bangladesh it can subsequently reach these 'hard to reach' people, while also improving Higher Education

Mapp (2002) explores why and how parents are involved in their children's education. This article is another example that discusses education below the HE level, but links the strong foundation of Secondary Education with bringing more people into the HE sector without making them 'hard



to reach' as they have already been 'reached' through their formative years. She explains that the 'hard to reach' label is 'often bestowed on parents from urban, lower socioeconomic communities' (p.2) and that engaging these 'hard to reach' parents would accordingly engage and reach their 'hard to reach' children. Mapp further identifies that 'hard to reach' students are those who 'qualified for free or reduced priced lunch' (p.1). This is based upon a research project carried out at one institution, which encourages parental influence on their children's education through a family outreach programme. She discovered that parents are more likely to engage and positively affect their child's education when the institution feels like a 'family' (p.15).

Kagan and Duggan (2011) explore how creative and visual educational methods can be used to support 'hard to reach' groups in understanding and communicating complex ideas and their experiences within their communities. They examine the use of civic engagement in reaching students who are part of "urban regeneration communities" that fall within the Low SEC description. Kagan and Duggan look at the effectiveness of different initiatives and their effectiveness of increasing civic engagement for students and universities. Additionally, due to the literature covering multiple projects, which are aimed at multiple groups of people, this article features three different descriptions of 'hard to reach': Low SEC, Vulnerable and Marginalised Populations, and BME. One of the projects that Kagan and Dugan evaluated was called 'Writing Lives', which set out to 'involve marginalised individuals within the local ethnic minority communities' (p.399). The project attempted this by holding workshops in which various international communities, people and students would talk about their experiences. Subsequently, some of these 'hard to reach' group members decided to enrol for university courses, which shows that the implementation of students and universities in civic projects has been a successful method to engage people from 'hard to reach' groups.

Boyle-Baise, Brown, Hsu, Jones, Prakash, Rausch, Vitols and Wahlquist (2006) contend that the 'hard to reach' group consists of lower income families and communities (p.19). They examine the differences that "service learning" and "learning service" can bring to students who are part of this 'hard to reach' group. Boyle-Baise et al argue that "learning service" enables the 'civic' while enhancing students' sense of social responsibility and to improve social programmes (p.17). They attempted this by creating a research project that aimed at understanding students views and voices on what service was and how it can be utilized to reach 'hard to reach' populations in Higher Education. There were three themes that emerged throughout the project; making meaning of service, practicing shared control and learning from flawed research (p.19). These three themes, although separate, were interdependent. They argue that from these three themes, they reconstructed their ideas surrounding "service learning" and changed it to "learning service", which allows for an education that fosters democratic aspects such as discussion and civic engagement.

Gale, Sellar, Parker, Hattam, Comber, Tranter and Bills (2010) examined how early interventions in school can lead to improving HE outcomes for disadvantaged students. They argue that their research aims at trying to understand and enable people from 'disadvantaged groups – particularly Australians from low SEC backgrounds – to access and participate in HE' (p.vii). Gale et al define "early" as 'pre Year 11' and interventions were defined as 'organised and strategic



outreach programs [sic]', which were designed to manoeuvre a population in a particular direction (p.1). All of their interventions included four main strategies at increasing civic engagement; assembling resources, engaging learners, working together and building confidence. They argue that there are few interventions that have the strategic intent of 'improving availability of university places for students' (p.28) and this is due to how this is normally tackled in the post-compulsory years and also the responsibility of the government rather than the individual institution. Therefore, the method that Gale et al suggest to engage the 'hard to reach' is to improve and/or create government policy and programs that aim to increase the likelihood that students from low SEC backgrounds make their way into HE. Programmes based on capacity-building that attempt to familiarise students and their parents with the University (p.17) must be aimed at these students in order to generate a culture of possibilities, ambition and achievement.

Sander's (2013) article does not mention the term 'hard to reach', however, the article discusses how students who come from a low SEC background can suffer from stigma and prejudice while attending colleges that are mainly populated by students who come from higher Socio-Economic Classes. Sander investigates how dialogue and an increase in student agency can overcome this stigma. This increase in dialogue was facilitated through an event that brought different students together called '*Understanding Your Misunderstandings*'. It consisted of each person writing down brief first impressions of each other and then discussing them in two small groups. These groups and events aim to open up "honest" discussion between students and bridge the gap between people who come from different classes. An increase in student agency at this institution has set in movement the foundations of opening up and overcoming preconceptions that people have surrounding the class system.

Kelley, Lesaux, Kieffer and Faller (2010) offer a very clear and definitive description of who their 'hard to reach' students are when they write that in 'urban middle schools across the United States, large numbers of struggling readers walk into classrooms every day...many of whom are learning English as a second language (ESL) and/or come from low-income backgrounds' (p.5). Due to the reference of students with ESL, this piece of literature features in both the Cultural Minorities and Low SEC categories. Kelley et al examine if a change in teaching and curriculum can reach this 'hard to reach' group. They attempted to determine if 'regular, systematic instruction in academic vocabulary in mainstream classrooms could be effective in boosting students' reading comprehension skills' (pp.5-6). This curriculum involved a multi-stage process, which started by engaging with a short piece of text, then examining depth rather than breadth in this text. This was followed by teaching specific strategies for word learning and incorporating activities to promote word consciousness. The curriculum that Kelley et al propose is supposed to 'equip students for success' (p. 12) but they understand that for students in middle school to develop a deep understanding of 50,000 words, the words need to be 'pulled apart, put together, defined informally, practiced in speech, explaining in writing, and played with regularly' (p.13). This curriculum therefore needs to be paired with effective teaching to educate and engage the 'hard to reach'.



2.5 Young+

In attempting to draw out themes to categorise the range of literature that uses the term 'hard to reach' in relation to Higher Education, this review encountered a number of pieces where people could be considered to have multiple and intersecting disadvantages. This was particularly commonly found in regards to young people who were 'hard to reach' by virtue of both their age and other characteristics such as their ethnicity or social class. This section will explore the literature that describes the experience of young people in this position and draw out areas where potential strategies to reach these people have been developed. Figure 7 outlines the range of categories that were featured alongside 'young' with interestingly only one article in this review suggesting that it is youth alone that makes people 'hard to reach'.

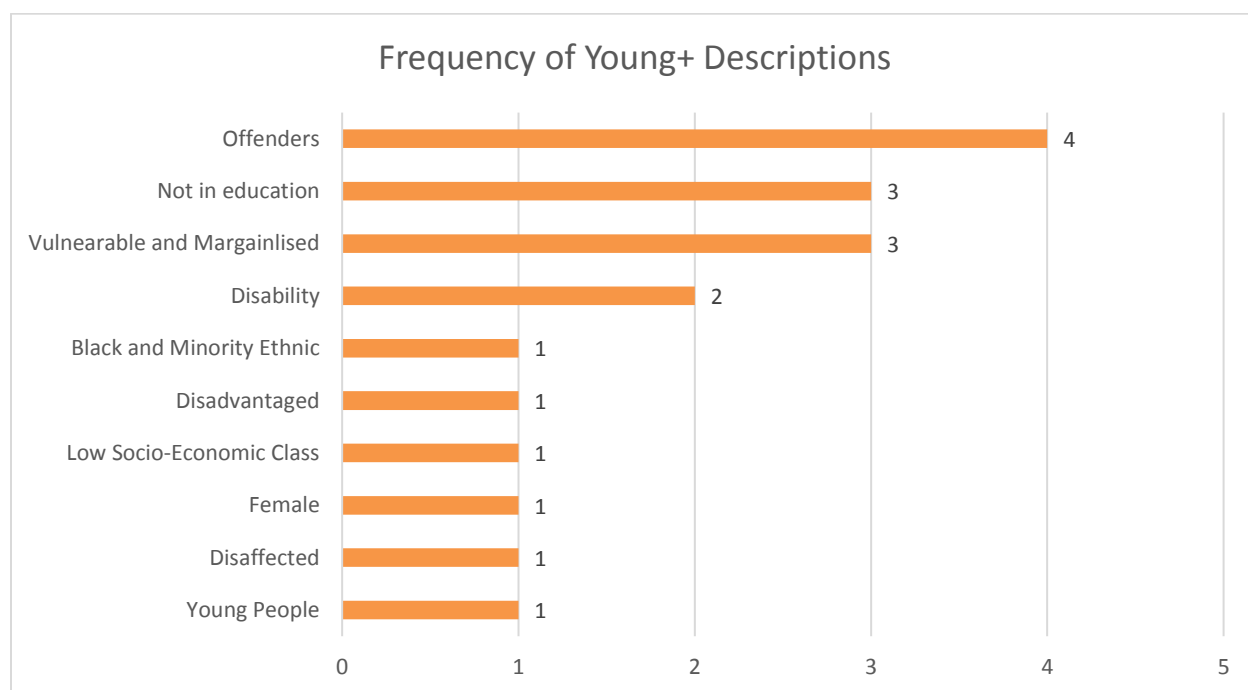


Figure 7: Frequency of Young+ Descriptions of 'Hard to Reach' Students

Ecclestone (2004) specifically points towards young people as being 'hard to reach', but also offers three extra additions; marginalised and vulnerable; and disaffected (p.112, p.113). Ecclestone does not, however, offer a method to engage these students. She explains that education is becoming a form of demoralised humanism (p.133), which has begun to paint the profession as elitist, idealistic and sentimental. Additionally, she claims there is a de-humanization and de-moralization of education at all levels, especially those in professional and policy-making positions, which needs to change in order to make education feel accessible to all.

Russell (2013) investigates young people who are not in education, employment or training (NEET). Her article explores the issues surrounding defining NEET and how carrying out ethnography can allow researchers to understand how students find themselves in this situation. She states multiple times that these NEET young people are 'hard to reach' (p.46, p. 47, p.58). Her article focuses on the methodological, practical and ethical implementations of carrying out ethnography with this 'hard to reach' group of students and therefore this article does not offer a



method to engage these young students but rather how to understand how certain issues can be avoided and overcome.

Izekor (2007) features as a chapter author in a book entitled *Working with Black Young People*. In this chapter, she explores the myth that black young people are 'hard to reach' and highlights how negatively this term, and those akin to it, can affect the social and academic development of young black men. She states that the descriptors vary for this group and they are often referred to as; 'low-achievers, socially excluded, hard to reach, at risk of offending' (p.64). Izekor highlights how such assumptions are damaging for young black men as these stereotypes have become culturally embedded in society, which leads to the young black men internalising these descriptions for themselves. They then assume this behaviour based on the notion that it is expected of them and because society views them as 'problems that need to be solved' (p.66). She shows how this is perpetually causing issues for young black men in their educational experience, as they are prepositioned into the stereotypical descriptions listed above. She states, '[a]s the young men grow older, this childish resentment turns into adolescent angst that displays itself in an attitude of angry indifference often mistaken by educators as a lack of motivation or aspiration' (p.66). Therefore, Izekor emphasises the need for a range of targeted interventions, such as training, support groups and one-to-one sessions, that will inspire and engage this assumedly 'hard to reach' group. She suggests these interventions need to be formed in partnerships with schools, parents, policy makers, practitioners, young black men and black men generally (p.73).

Joyce and Weibelzahl (2006) examine the use of mobile phones in lowering the barriers to accessing support for 'hard to reach' young learners who suffer from depression. In line with the Equality Act 2010 (see section 2.6), mental health is included within the disability category and subsequently this article features in *Young+ and Disability*. They contend that learners face a number of barriers to seeking help; 'fear, privacy, shame, guilt, embarrassment, lack of trust in others, the feeling that one should be able to cope on one's own, not knowing what support is available or how to get it' (un-paginated). Joyce and Weibelzahl further state that the use of mobile phones and technology has been paramount in overcoming these issues that 'hard to reach' students face due to; 'timeliness, anonymity, ubiquitous, initiative can be on service side, guise of normal practice, written - retention, asynchronous, impersonal - machine conversation' (un-paginated). Joyce and Weibelzahl believe that technology can help these 'hard to reach' students overcome the barriers to accessing this support, similar to how other studies have indicated that text messaging has helped college students successfully quit smoking (Obermayer et al, 2004; and Rodgers et al, 2005 in Joyce and Weibelzahl) and give support to patients suffering from bulimia (Bauer et al, 2003 in Joyce and Weibelzahl).

Shildrick and MacDonald (2007) carried out a longitudinal research project that investigated the biographies of 'hard to reach' young women and men who were growing up in some of England's poorest neighbourhoods'. They established from their longitudinal study that 'youth ... is ... a critically important period in which life chances are established and through which society is reproduced in familiar or different forms' (p.601). However, Shildrick and MacDonald do not offer



a method to engage these 'hard to reach' groups or suggest how educators can positively influence the youth period of these young people's lives.

Broadhurst, Paton and May-Chahal (2005) investigate a new innovative intervention tracking system, which has allowed access to 'hard to reach' groups. They argue that this 'hard to reach group' are children who have gone missing from education due to their alternative and criminal lifestyles (p.118). This article, although offering a description of who these 'hard to reach' students are, does not offer a method to engage them.

Ntloedibe-Kuswani (2008) is another example of an article that offers multiple descriptions of who 'hard to reach' students are and how we can engage them. She outlines that 'hard to reach' groups consist of students who are 'young offenders, traveller communities, disengaged teenagers and work-based learners' (p.248). Additionally, Ntloedibe-Kuswani discusses how mobile phone learning can be utilized in engaging these 'hard to reach' groups. She utilises previous research which reports on the high rates of mobile phone ownership around the world and argues that education must begin to use this ubiquity to educate these 'hard to reach' communities. Ntloedibe-Kuswani believes that mobile phone learning can 'bridge the gap between the classroom and its community' (p.249) and 'enrich distance learning by making it more interactive and collaborative ...and can help learners negotiate and construct knowledge from multiple perspectives' (p.25). However, at the time of publishing there were no results to suggest this technology had an effect on engaging these 'hard to reach' students.

In 2011, Baroness Sharp of Guildford commissioned a report into the importance of FE colleges in their communities. For Sharp, FE colleges 'occupy a pivotal space in the learning and skills landscape' (p.19) that are integral to reaching the 'hard to reach' groups that Sharp refers to as young and 'disadvantaged'. She explains that FE colleges must work alongside government agendas to 'revise governance and accountability mechanisms, maximise cross-departmental co-operation, clarify the college's role in serving local communities, remodel the college-community curriculum offer [and] support staff managers and leaders across all colleges' (p.25). By achieving these aims, FE colleges can not only benefit themselves, but also contribute to the growing HE sector in the UK through providing foundation degree supervision, Higher National Certificates and Higher National Diplomas. Sharp further explains that FE colleges must form partnerships, create a new generation of entrepreneurial college leaders, develop partnerships with local employers, make government work at the local level, ensure that their voices are heard on local economic and social planning partnerships and develop new ways of thinking about the curriculum (p.6). If colleges do this, Sharp believes that FE colleges can not only widen participation for 'hard to reach' students, but also improve the HE sector as a whole.

Mackenzie-Robb (2007) defines 'hard to reach' students in the following way: '(potential) learners as being young people who, for whatever reason, cannot or do not regularly attend educational institutions and consequently their life chances are in jeopardy' (p.5). Additionally, Mackenzie-Robb explains that schools must utilize customised learning services to reach other types of 'hard to reach' learners, traveller children and single, unmarried parents (p.24). Mackenzie-Robb draws on an initiative that aims to embed 'ICT into the curriculum at all levels... known as the e-strategy



which has the core aim of using technology to engage with hard-to-reach learners using special needs support, and in finding more motivating ways of learning' (p.9). Furthermore, 'technology is seen as a key enabler' for these potential 'hard to reach' learners. Mackenzie-Robb concludes by stating that technology 'can deliver access to learning resources and plans anywhere, anytime, and that it represents a means and a method of communication for registered users' (p.24).

Hillier (2009) examined the use of technology to encourage 'hard to reach' students who are disinterested in Vocational Educational and Training (VET). Hillier states that 'VET helps prepare people for work, develops their skills while at work and changes what they are doing so that they can work in new or different occupations' (p.6). This form of education can subsequently adopt a range of different techniques to educate and motivate these students, such as Virtual Learning Environments (VLEs), multimedia hardware and software, social networking, use of PDAs, M-Learning and game machines (p.6, this list is not exhaustive). Hillier contends that the use of technology is being used to 'encourage young people to engage in VET ... [and] engage hard-to-reach learners' (p.6). Similar to Foskett (2003) and Sharp (2011), Hillier draws on the comparison and usefulness of foundation degrees to bridge the gap between FE and HE. Foundation degrees, to Hillier, offer a new way to create a synthesis between technology and education, whether it is vocationally based or not. She also draws on the implementation of CoVEs (Centres of Vocational Excellence – see the discussion of Mager, 2002 in section 2.2) to further demonstrate how this important form of education has established itself in the UK sectors.

Mayer and Harrison (2012) define their 'hard to reach' students as young learners who may find it difficult to express their attitudes of concepts and programs (p.47). They argue that these young people tend to have erratic schedules, limited access to transportation and may struggle to meet groups of strangers to share their opinions (p.47). Therefore, they argue that the 'key' to engaging these students is to utilize the internet, which has become an integral part of young people's lives. They argue that the introduction of web-based learning communities such as the E-Learning Commons (ELC), which has been implemented at University of Georgia, have allowed for the creation of online discussions through chat rooms, instant messaging and social networking sites. Additionally, Mayer and Harrison suggest that 'online focus groups were found to be an effective and inexpensive means of formative evaluation for program [sic] development' (p.51).

2.6 Disabled

This review found a range of literature that focused on the experiences of students with a disability or those with learning differences. This category is in line with the definition provided by the Equality Act 2010 and requirement for Disabled Students Allowance (DSA) in the UK, whereby specific learning differences, mental health conditions and long-term health conditions were included in the definition of disability (Equality Act, 2010). While we are not conflating these two groups and there are clear differences in needs, many of the proposed solutions have commonalities around increasing supportive and inclusive practices. As such, these two groups (and all the variation within) are featured together here.

Kellet (2004) discusses theoretical frameworks that underpin 'interactive pedagogy for students with severe and complex learning difficulties' (p.175). She examines how a form of interactive



pedagogy, called “Intensive Interaction” is an effective method to engage ‘hard to reach’ disabled students. Kellet explains one of the greatest strengths of Intensive Interaction is that it is a ‘positive response to pupil diversity, as it focuses on making the curriculum fit the student rather than the other way around’ (p.179). Additionally, this pedagogy aims at creating a sense of community, leading to belonging and building communication connections, which culminates in a truly inclusive atmosphere for disabled students to learn and engage with their studies (p.197). Intensive Interaction, therefore, allows for the development of sociability and communication, which is the essential first step in learning for these students.

Cassar and Jang (2010) do not use the term ‘hard to reach’, but their article is centred around students with reading disabilities and attention deficits, such as ADHD, and therefore have been placed in the Disabled section. They specifically focus on Grade 6 students with these disabilities and how a game-based approach can engage and educate these ‘hard to reach’ students. They examine a study that placed students in two separate educational settings; traditional and game-based and its subsequent results. Cassar and Jang hypothesized that students who took part in the game-based approach would ‘perform better on measures of phonological awareness (PA), phonological memory (PM), rapid naming, word recognition and spelling’ (p.194). The results of their study show that their hypothesis was half correct, they state that ‘the game-based intervention appeared to have a more positive impact on improvement of skills related to rapid naming, word recognition and spelling abilities’ (p.206). However, the other half of their hypothesis was proven inconclusive when they state that ‘no notable treatment effects were observed on the improvement of the PA or PM skills’ (p.206). Cassar and Jang subsequently state that more research is needed to fully determine whether game-based pedagogy can engage those students who suffer from ADHD or other reading disabilities.

Devi and McGarry (2013) explain how online learning can be used to engage disabled, ‘hard to reach’ students. They examine the effectiveness of the Nisai Virtual Academy (NVA) in engaging these ‘hard to reach’ students who suffer from ‘physical disabilities, persistent and long-term medical issues’ (p.36). The NVA implements a form of institution-level technology that aims at creating an e-space that provides children the opportunity and support to ‘be healthy, stay safe, enjoy and achieve, make a positive contribution; and achieve economic well-being’ (p. 38). Devi and McGarry further state that the NVA is defined through seven key elements; ‘live lessons, grouped by ability, limited class sizes, continuous professional development for staff, access to support, emphasis is placed on nurturing a vibrant online community and personalised learning’ (p.37-38). This online learning resource facilitates an interactive and experiential process between both what is taught and the learner (p.43) and therefore attempts to “reach” the disabled ‘hard to reach’ students.

Stuart (2012) investigates how students who suffer from Autism Spectrum Disorder (ASD) can use technology to ‘find their voice’. She further explains that ‘hard to reach’ students are those who also suffer from;

- *No or limited purposeful verbal speech;*
- *Difficulty expressing needs and wants;*



- *Echolalia (repeating a word or phrase that has been previously heard);*
- *Loss of words that the child was previously able to say;*
- *Inability to identify objects (poor vocabulary development);*
- *Difficulty answering questions;*
- *Limited attention to people and objects in the environment; and*
- *Poor response to verbal instructions. (un-paginated)*

She states that ‘the availability of inexpensive mobile technology has rapidly and considerably changed services for students with complex communication needs’ (un-paginated). The utilization of such technology as iPads or tablets can instill a ‘cool factor’ that will allow students with ASD to gain more confidence, while also making them easier to ‘reach’, due to the higher levels of communication through text-to-speak and vice versa. However, Stuart also explains that mobile devices may not be a perfect fit for all students with ASD due to a wide variety of reasons, such as dexterity of the user, durability of the device, software crashes and software glitches (this list is not exhaustive). It is important to remember, as Stuart writes, ‘mobile technology devices are not cures for ASD, and there are students whose abilities simply will not allow them to use these devices’ and it is a constant battle to try and find ways to engage all students that suffer from ASD. However, those who can utilize the mobile technology can become easier to ‘reach’.

Butcher, Sedgwick, Lazard, and Hey (2010) examined whether inclusive approaches to assessment enhance student learning in HE. This article is also the only one that throughout refers to ‘hard to reach’ students by a different name; the “scrapers”. This group of students mainly consisted of those who were either young (under 21 years old), male, BME, Non-A level entrants, or those who suffer from declared dyslexia (p.34). They contend that assessment strategies at the University of Northampton must change and widen participation for these “scrapers”. They argue that the new strategy must include five main points including preparedness, which aims at facilitating better student understanding of the process of and reasons for assessment. Study skills must also support students to become more confident in managing assessment tasks and to support their learning from an in-house ‘Flying Start’ programme, which is a pre-HE course aimed at mature students. Feedback aims at utilizing smaller chunks of formative assessment in the student journey, especially in Year 1, which in turn will produce prompt feedback for summative assessment. Alternative assessments would create greater range and choice for all students allowing for transition periods between types of independent learning that students must adapt to through Years 1 to 2, and 2 to 3. The final change involved shifting the dyslexia support tutors role into an anticipatory role rather than a reactive one. Butcher et al contend that with these changes in assessment strategy, the University can enhance the learner experience in HE for the ‘scrapers’.

Sternberg (2002) believes that teachers always try to reach all their students, but sometimes find themselves with students they simply cannot reach. Sternberg explains that ‘hard to reach’ students can be those with ‘disabilities, disorder, motivational problems, health problems and so forth’ (p.384) and subsequently fall within two categories; Disabled and Low Motivation. Sternberg himself is an educational psychologist and therefore his method to engage is formed around his theories of successful intelligence. Successful intelligence argues that ‘some students who do not



do well in conventional courses may, in fact, have the ability to succeed, if they are taught in a way that better fits their patterns of abilities' (p.384). Successful intelligence, however, requires teacher input, as Sternberg notes 'one of the most useful things a teacher can do is to help a student figure out how to make the most of what he or she does well and to find ways around what he or she does not do well' (p.385). There are four keys that lead to effective teaching in Sternberg's model; teaching for memory learning, teaching for analytical learning, teaching for creative learning and teaching for practical learning. By understanding that students may learn through either one of those four keys or a combination of them, teachers become more effective and therefore can engage the 'hard to reach' students that Sternberg describes.

2.7 Undereducated

This section outlines the literature that discussed the role that either inadequate or insufficient educational experiences played in defining students as 'hard to reach'. Many solutions in this area are naturally more tied to changes in policy and widening participation to Higher Education than to students while they are attending a Higher Education institution. Nevertheless, the undereducated code offers an interesting insight into students who have been labelled as 'hard to reach' before attending university.

Putwain, Nicholson and Edwards (2016) use a variety of terms to describe their 'hard to reach' students, such as the 'hard to teach, most alienated, most vulnerable' (p.2) but narrow down into a specific description when they state that 'hard to reach' students are 'children who have been excluded from mainstream schools, children who refuse to attend mainstream school and cases where the child or their family has been in dispute with the school' (p.2). They also discuss how alternative provision (AP) can positively affect these students and engage them. Putwain et al describe AP as the 'education of students for whom mainstream schooling is no longer a viable option' (p.2). The aim of AP that is outlined by the Department of Education 'indicates that AP should be matched to the specific personal, social and academic needs of pupils' and that it should improve 'pupil motivation and self-confidence, attendance and engagement with education' (p.2). Putwain et al explain a typical AP lesson when they state that they support a high level of 'individualised learning, a high degree of instructional interaction between students and the teacher, or lesson support staff, and a high degree of student support' (p.7). Furthermore, they discovered that AP has been successful at re-engaging these students with their education while working towards passing qualifications, such as GCSEs.

Davies, Lamb and Doecke (2011) authored a review commissioned by Skills Victoria on behalf of the Victorian Skills Commission's Access and Equity Committee in relation to effective re-engagement models for disengaged learners. Davies et al describe these disengaged learners as 'members of the low skill adult learner group' and additionally class these as 'hard to reach' (p.15). In the literature, these 'low skill adult learner groups' are defined as '15-64 year-olds who do not hold Year 12 or Certificate III or above qualifications and who are either unemployed or not in the labour force' (p.2). In order to tackle low attainment levels of these disengaged learners, the Australian federal and state governments have begun to enforce attainment targets. The review therefore offers effective ways to increase these rates of attainment. These methods include providing easily accessible information, bringing learning to the learner, targeting high-



need groups and establishing lasting meaningful relationships. Additionally, they evaluate methods aimed at the wellbeing of engaged students, such as non-academic support and taking a client sensitive approach to wellbeing among others. Another key area they evaluate in relation to increasing attainment levels is through pedagogy that can include methods such as making learning less formal, providing flexible options and addressing literacy and numeracy skill development needs. The last key area that Davies et al argue is important in reaching these disengaged learners is through improving pathways in education. This can be accomplished by establishing connections with the community and other institutions, using intermediate labour market approaches and integrating work-based learning programmes and supports.

Sharpe, Deepwell and Clarke (2013) describe their 'hard to reach' as under-educated students, who are 'failing modules, not attending, or not submitting assessed work' (p.9). They evaluate developmental initiatives that were implemented at Oxford Brookes University in line with their Strategy for Enhancing the Student Experience. One of these initiatives was implementing faculty-based student support through the use of a Student Support Coordinator (SSC). The main role for the SSC was to 'provide a one-stop shop for students in a convenient location for each faculty, handling enquiries on a broad range of issues, answering them where they can, offering support and acting as a referral service' (p.4). One of the strengths of the SSC is that it facilitated a move away from a deficiency model of student support to a proactive model. Importantly, these SSCs were included in the 'hard to reach' students' communities, allowing them to easily contact and assist students who were failing, not-attending or not submitting work. The implementation of the SSCs allowed for the already established Academic Advisors to focus solely on the academic aspects of the above problems, rather than the emotional aspects that the SSCs would attempt to tackle.

Machin, McNally and Meghir (2010) describe their 'hard to reach' pupils as those who 'leave the education system with few or no educational qualifications' (p.366). They also contend that an increase in resources would be 'useful in improving outcomes in schools' (p.366). Machin et al evaluate whether the Excellence in Cities (EiC) was successful in enhancing student performance. The EiC aimed to give more money to disadvantaged schools with the clear goal of increasing student performance and underachievement for inner-city schools. They discovered that the EiC did raise achievement in mathematics as well as school attendance, but warned that these results should be treated with caution as each school had different groups of pupils who were underachieving. They conclude by stating that 'additional resources can matter and that education policies can help to turn around the fortunes of poorly performing inner-city schools' (p.387).

Knox (1983) inspected the importance of library initiatives in reaching adults with low levels of formal education, which he determined were the 'hard to reach' population. Knox's initiative surrounds an increase in library services for adult learners, which was required in the context of increasing accessibility to educational technology. Knox also mentions the pluralistic nature of society and the growing amount of providers offering informal continuing education (p.563). These two issues subsequently contributed to a lack of cohesive formal education, which he believed



could be combatted by an increase in library services, such as counselling and information services.

Knox (1987), similar to his 1983 article, defines 'hard to reach' as those who are undereducated. While this is the most explicit definition that Knox offers for 'hard to reach', he occasionally mentions black Americans and blue-collar shift workers in relation to low-levels of formal education. However, in this article, he offers another method to engage them and explores how other international institutions teach their students. Knox believes that looking outwards to other institutions will have a similar effect to how those who travel internationally feel when they come back home. International travellers feel like they have gained an 'increased understanding of their own beliefs and practices' and that 'international travel can broaden perspectives' (p.3). Therefore, Knox argues that a 'comparative perspective on adult continuing education in other national settings can contribute to planning program content and process' (p.3). Consulting other institutions can only benefit teachers' own educational practice at engaging the 'hard to reach' as Knox defines them.

2.8 Cultural Minorities

Although this section contains just one piece of literature that only specifies cultural minorities as 'hard to reach' students, it is worth noting that there are seven other pieces of literature that refer to cultural minorities, however these are embedded in other sections as they were referred to alongside other descriptors. Cultural Minorities was coded from the original descriptions as those who were either said to be culturally excluded, or those specifically with English as a second language (ESL) (see Wishart and Green, 2010).

In 2002, Milbourne explored the 'experience of members of hard to reach and culturally excluded groups' (p.287) in education. She continues to say that these groups of 'hard to reach' people tend to be excluded from participating in society, due to factors that other groups take for granted, such as 'low income, lack of employment, low skills, low self-esteem, poor health and housing conditions, high-crime environments, family breakdown and mental illness' (p.287). Subsequently, this article features in a large amount of categories of 'hard to reach' groups; Cultural Minorities, Low SEC, Undereducated, Low Motivation, Offenders and Disabilities. However, Milbourne does not offer a method to engage this large group of 'hard to reach' students, simply stating that this 'exclusion will remain largely unspoken unless such marginalised groups can find a place where their voice and their priorities are accepted' (p.302).

There is one article that suggests offenders are 'hard to reach' in this section, however, there are two other instances where offender is offered as a description of 'hard to reach'. As such, these articles are discussed in other sections as they examine offenders alongside another description of 'hard to reach'. This descriptor for 'hard to reach' discusses possible methods for re-engaging these students after a period at which they have gained the 'hard to reach' label of 'offender'.

The Wisconsin Department of Public Instruction (DPI) (2002) reviewed how peer-learning can be used to help students who suffer with alcohol and other drug abuse problems (AODA). These students that suffer from AODA therefore are the 'hard to reach' students that the DPI aim to



engage. Although the article focuses mainly on AODA students, they also mention that peer-review can lead to positive health-related outcomes that aim to reduce or prevent HIV/STDs, pregnancy and violent behaviours. The article is built around using peer learning to support these students, which stems from the idea that peers emerge ‘as the most significant social network’ during adolescence (p.1). This identifies whether peer-led programmes can ‘prevent or reduce important health-related problems, identify key characteristics of such effective peer programs [sic], identify the extent to which these characteristics are present, and describe the benefits of such peer programs [sic] in Wisconsin schools’ (p.1-2). Peer learning and peer education can ‘reinforce learning through continued contact with student peers and are very often better able to access hard-to-reach groups of students’ (p.1). By having students as peer educators, it could possibly remove those power relationships that could make these students ‘hard to reach’. Overall, the peer learning programme seemed to be a success over the 2001-02 academic school year, with the DPI recommending a continuation of the programme.

2.10 *Vulnerable or marginalised population*

This section contains articles that specifically stated that ‘hard to reach’ students are those from ‘vulnerable or marginalise populations’. The first article in this section discusses how this group of ‘hard to reach’ students are best engaged through civic engagement. This section then explores a paper that highlights the benefits of using secondary data for research, as it can protect the ‘vulnerable and marginalised populations’ deemed ‘hard to reach’. The final piece of literature in this section is also categorised under Young+, as it discusses a project used to engage young vulnerable populations with sexual health education.

Furco (2010) only mentions the term ‘hard to reach’ once in his paper and conclusively writes that ‘hard to reach’ people are those who are from ‘vulnerable or marginalised populations’ (p.383). Although he offers no methodology of how he reached this definition, he does offer a method of how to engage them; increasing civic engagement. Furco argues that HE in the United States has always seen itself as key in promoting and teaching civic responsibilities, as is seen by the Harvard College brochure from 1636, which states that the college sought ‘to advance learning and perpetuate it to posterity; dreading to leave an illiterate ministry to the churches, when our present ministers shall lie in the dust’ (p.375). However, times have changed as have the methods used to engage students in their civic responsibilities. Furco outlines a change in pedagogy towards encouraging both faculty members and their students to conduct work within and with members of their communities, such as the United States Department of Housing and Urban Development’s Community Outreach Partnership Centres (COPC) (p.377). This pedagogy has again shifted focus and Furco pertains that this focus should now be on building what he calls the “engaged campus”, which aims to carry on the work that the COPC and other initiatives had started. He explains that ‘at an engaged campus, efforts are made to maximise and optimise opportunities for public engagement across all aspects of the academy’s core functions’ (p.381). The engaged campus must also have an aspect of community-engaged research, which infuses community voices into these projects and missions. These partners can ‘help identify appropriate research questions to ask, determine which instruments and measures might resonate best with particular populations, provide feedback...offer assistance and provide important perspectives’ (p.383). However, Furco does admit that these initiatives will only happen if funding bodies



support them. Fortunately, there are more of these organisations supporting colleges who are renewing their civic “vows” while utilizing the engaged campus idea.

Smith (2008) examines the usefulness of secondary data analysis in regards to educational research. In this article, she states that an advantage of secondary data is that it is unobtrusive and it carries the ethical benefit of not collecting data from individuals, protecting their privacy (p.332). Subsequently, she believes that secondary data collection is useful for research ‘into sensitive issues and of vulnerable and hard to reach groups’ (p.332). She further states that this type of data analysis is ‘most effective when combined with other approaches, such as large, in-depth studies that produce large amounts of datasets’ (p.336). However, she does not offer a method to engage these vulnerable groups in her article.

Orme, Salmon and Mages (2007) explore the evaluation of the “Project Jump”, a sexual health drama project for ‘hard to reach’ young people. This article falls within the Young+ section as well as this section, as they talk about the young marginalised groups and how practitioners can identify and engage them (p.352). “Project Jump” stemmed from government policy that was ‘increasingly prioritising the reduction of teenage pregnancy and sexually transmitted infection rates in young people’ (p.353). These young people were identified to have ‘educational, social and behavioural difficulties’, which ranged from ‘school exclusion, poor educational achievement, risk of criminal activity and family violence to living in deprived communities’ (p.361). The project was seen as a success, as it achieved access to their ‘hard to reach’ population, while educating them on sexual-health life skills. This is supported by the claim that ‘the majority of young people found their involvement in the project to be a positive and exciting one’ (p.361). Project Jump is another example of how government policy and programmes can be introduced or revised to engage ‘hard to reach’ young students.

2.11 *Distance Learners*

While only a small number of pieces reviewed dealt with distance learning, this was a definition which had a high level of clarity when using ‘hard to reach’ due to the physical distance. While distance learning inherently offers a clear solution to groups that are geographically ‘hard to reach’ there is a risk that such students do not develop the same sense of belonging as students who learn face-to-face and are physically present.

Parke and Tracy-Mumford (2000) argue that distance and online learning is an effective means to reach ‘hard to reach’ students such as distance learners. They offer a clear description of who ‘hard to reach’ students are when they state that their aim is to provide ‘access for hard-to-reach populations, such as the homebound’ (p.22), while also referencing that distance learning is an effective method to engage them. Parke and Tracy-Mumford define distance learning as ‘instruction mediated by print or some form of technology that takes place when the teacher and learner are separated by space and/or time’ (p.3). Additionally, they argue that distance learning allows for adult learners to ‘meet life demands, especially learners who are faced with work and family responsibilities, or who live in rural areas, and who cannot participate in traditional adult education programs [sic]’ (p.3). They also argue that educational institutions should pair with



already existing online communities such as virtual high school, PBS LiteracyLink and ALMA (24) to overcome insufficient resources in development.

Kirkwood (2015) examines the use of technology in positively affecting the educational experience of distance learners. Kirkwood notes that 'there has been considerable growth in the adoption of technology within HE, both for distance and on-campus teaching and learning', (p.210) but continues to question what precisely is being enhanced by technology. Is it;

- Increasing technology use?;
- Improving the circumstances/ environment in which educational activities are undertaken (for example, increasing flexibility and accessibility)?;
- Improving teaching practices?;
- Improving (quantitative and/or qualitative) student learning outcomes? (p.210).

Additionally, he notes that in 'economically developed countries, many campus-based universities now offer some provision for off-campus (distance) learners, while aspects of 'blended learning' are becoming commonplace for on-campus HE students' (p.206), which has been integral to the establishment of technology in HE. Furthermore, Kirkwood argues that 'University policy-makers, managers and teaching need to apply *joined-up thinking* to technology use' (p.217) through coming together to identify and specify 'aims and purposes of using technology to support teaching and learning, bearing in mind that terms such as these are open to a variety of interpretations' (p.217).

Sapp and Simon (2005) also contribute to the description of distance learners as 'hard to reach' students. They argue that students who utilize distance learning opportunities are more likely to drop out from these courses, suffering high levels of attrition and low levels of retention. One of the benefits that Sapp and Simon see with online learning is its cost effectiveness, which would allow institutions to tap into previously unreachable markets. However, they argue that for online courses to be successful, students who are enrolled on them need to be able to be highly self-motivated otherwise online learning will simply fail for those students. Sapp and Simon draw on students who use the online learning courses to demonstrate this, with one saying that 'if you don't keep up with the assignments, you didn't stand a chance of catching up and doing a decent job' (p.7). Additionally, Sapp and Simon argue that not only online learning must continue to improve, but also face-to-face learning for 'writing' students.

Black and Blakenship (2010) investigate the use of library initiatives in reaching the 'hard to reach'. This article covers the implementation of a Learning Management System (LMS) and its effects, which according to the literature seemed to be positive, with students commenting '*So helpful, I don't know how we did research in the old days*' and '*it saved much time and was very easy to access*' (p.466). For them, the 'hard to reach' were both regional and distance education students. The problem that was encountered by these students is that sometimes, distance and regional students would never set foot on a campus or go to the library. They examined whether the introduction of the LMS allowed regional and distance education students to engage more with their studies and research topics. The LMS attempted to bridge this gap by utilising a system called the Carmen Library Link (p.459) to make all resources available across all libraries that were attached to the Ohio State University.



2.12 *Low Motivation*

This section discusses articles which explored unmotivated or disengaged students as being 'hard to reach'. As such there is less specificity around which students should be included here, but this arguably allows more nuance and contextual understanding of the students rather than grouping them by characteristics. These articles tend to share an understanding of student engagement which stems from involvement in classrooms, or lack thereof.

Shernoff, Sanella, Schorr, Sanchez-Wall, Ruzek, Sinha and Bressler (2016) found that where students sit in their classes relates to whether they are 'hard to reach' or not. They argue that students who sit at the back may 'appear to be disengaged, doing activities unrelated to class, or socialising' (p.55). Shernoff et al's description of 'hard to reach' was placed in the Low Motivation section of this literature review because they write that 'sitting in the front of the room was associated with higher levels of participations and a more positive motivational profile' (p.63). They discovered that there may be a correlation between seating location and engagement through carrying out a research project whereby they asked two cohorts of an undergraduate financial accounting course to self-report their seating locations and their engagement, attention and other experiential dimensions, such as learning orientation. These included factors such as perceived learning and believing that the goals were clear, and classroom self-esteem, which consisted of five factors, including feeling successful, being in control and a sense of belonging (p.58). Alongside these, other experiential dimensions included intrinsic motivation (such as being enthusiastic and regarding it as important), flow conditions (self-assessment of skill level and perceived use of effort) and distraction (mind wandering, feeling bored) (p.58). Their method of how to engage the 'hard to reach' takes a different approach to many others. Instead of being a method that is institutionally based or teacher orientated, they argue that the onus must be on the student to be within 'reaching distance'. Shernoff et al's primary investigation examines whether there is a link between seating locations and engagement/achievement. They discovered that there is indeed a link between the two, with students who sit at either the front or middle tending to engage and achieve more in their attainment than their peers who decide to sit at the back of the lecture hall. They conclude by stating that it does not always mean that seating matters in relation to student achievement and engagement, however, on most occasions in their study there is a distinct connection between the two.

McCombs (2002) believes that 'hard to reach' students are those who have lost their 'boundless love of learning, natural curiosity and motivation to learn' (p. 1.). She explains that those students that become "turned off" from school, do so for a number of reasons. In her article, she deconstructs how students become unmotivated and how teachers and educational institutions can alter their practices to re-motivate them. She argues that everything teachers do in their classrooms has a motivational influence on students, either positively or negatively. Such examples include the way that information is presented, what activities are undertaken in the classroom and the amount of choice and control given to their students (p.2). The overarching principle for engaging the 'hard to reach' for McCombs is to allow students more control and choice over their studies, which include greater displays of active planning and monitoring of learning, and higher levels or student awareness of their own learning progress and outcomes.



Additionally, she contends that there is “overwhelming” support in favour of learner-centred practices that honour individual learner perspectives and needs for ‘competence, control and belonging’ (p.10). An increase in control and choice for the students would therefore increase motivation levels and allow students to “fall in love” with education again.

In 2006, Biesta investigated the lifelong learning process, in relation to whether it has any deeper significance, due to this process being constantly influenced by external forces, such as democracy and the economy. Biesta, however, does allude to who ‘hard to reach’ students are when he writes that ‘learners who, for some reason are not able or not willing to engage in ‘learning’ (176). Due to this description and its similarities with other articles in this section, Biesta’s description has been placed within the Low Motivation section. It is worth noting that Biesta himself is a political writer, rather than an educational one and subsequently, his article is based upon a critique of the state in relation to lifelong education.

In 2011, Dalgarno, Lee, Carlson, Gregory and Tynan evaluated the support for and the barriers to use of 3D immersive virtual worlds in HE. They argue that the use of these 3D immersive virtual worlds will create more engaging, personalized and student-centred learning experiences. This would be beneficial:

‘especially for hard-to-reach and unmotivated learner groups as well as those studying at a distance, as a particular area of opportunity, along with providing support for learners with disabilities or mobility issues to help reduce the need for them to travel’ (p.318)

As a result, this article has been placed within three categories; Low Motivation, Commuting Students and Disabilities. Dalgarno et al investigated the experiences and perspectives of 117 respondents to a questionnaire that related to the use of virtual worlds in HE learning and teaching (p.327). The results show that there are both benefits and barriers to implementing this technology in HE. Some of the barriers that are mentioned by Dalgarno et al are that there are high levels of time commitment and that it requires high levels of support. They also found that some respondents felt that there are limits in its authenticity of the representation and that students found themselves distracted by the virtual world or it's game-like appearance (p.327). Other issues that they found involved technological issues, including bandwidth, firewall, hardware requirements and client software. However, they also found that most respondents (93%) felt that the use of virtual worlds were motivating and engaging for students, with 84% agreeing that virtual worlds allowed for effective collaborative learning, and 87% believing that it allowed for learning through experiences in the context of the virtual world p.327). Although the article lists significantly more barriers than positives to utilizing this technology, they conclude by stating that there is evidence to suggest that ‘valuable student learning can and in fact did occur’ (p.327).

2.13 *Emotionally Detached*

As with the students from the previous section with Low Motivation, this section does not refer to more visible or measurable characteristics but more towards the disposition of the student’s mental health and internal processes. The pieces in this section include discussions of students



specifically with emotional difficulties, unlike the previous section that describes students who have low motivation towards educational activities.

Winter and Haines-Burnham (2005) investigate the Turning Point Program in New York in relation to providing educational support for students who present 'significant emotional difficulties' (p.37). They note that students and families turn to this programme after 'years of poor relationships with schools, family, law enforcement, and/ or mental health systems' (p.37). The team were unable to access the remainder of this article and subsequently, it has not been assigned a 'method to engage' because there is a possibility that it could be at least three (Widening Participation Initiatives, Effective Teaching or Government Policy and Programme) depending on the circumstances and background of the Turning Point Program.

Boone, Edwards, Haltom, Hill, Liang, Mier, Shropshire, Belizaire, Kamp, Murthi, Wong and Yau (2011) describe their 'hard to reach' students as those who do not seek or engage with on-campus counselling services while suffering from a variety of mental health issues. This description was placed within the Emotionally Detached due to the highly personal nature of this article and its relation to issues directly affecting emotions. The article outlines the problems and successes of a counselling centre outreach programme based at Cornell University, which was 'designed to reach students who were less likely to seek mental health services' (p.195) and was called 'Let's Talk'. Boone et al also suggest reasons why students decide not to use the pre-existing support services, including a lack of awareness, stigma, a lack of culturally appropriate services and mistrust of predominantly white service providers by ethnic minority students. The main aim of 'Let's Talk' was to bring these services to the 'hard to reach' students through using alternative methods, such as 'working outside the office', 'counsellor-in-residence programs [sic]', and allowing the student to dictate where the sessions will take place. Let's Talk is an innovative idea that embeds student support services within student communities, attempting to serve them 'where they are' in every sense.

Protheroe (2005) is another example of a piece of literature that does not explicitly define 'hard to reach' students, but the report itself is catered towards engaging students who are emotionally detached from their studies through effective teaching. Simply put, Protheroe believes that there is a critical element in effective teaching, which is for teachers to establish positive connections with their students (p.50). This, coupled with content knowledge and classroom management skills, is the three required skills to become the 'effective teacher'. Protheroe admits that teachers do not always have the time to develop strong and meaningful relationships with their students but it is imperative, as Mender states, that 'students will only care what we think when they think that we are' (Mender in Protheroe: 51). She believes that caring behaviours foster caring connections between teachers and students, which is simply "good teaching" and that the smallest actions, such as calling students by name, can have a large impact on engaging 'hard to reach' students (p.52).

2.14 Mature Students

While there is a large body of research about the engagement of mature students, it appears this is a group not commonly referred to as 'hard to reach' in the literature. Of the three articles



featured here, two focus on a specific form of engagement through technology, (which has its own challenges discussed elsewhere in this review). The only piece that uses the term exclusively with reference to mature students does so in terms of a wide range of challenges, in terms of both access and their experience, which does carry some of the weight of their under-representation.

Similar to Parke and Tracy-Mumford (2001), Barcelona (2009) describes 'hard to reach' students as those who use 'online distance learning' and 'older adults with obligations and responsibilities associated with jobs and families' (p.2). These descriptions therefore signified that Barcelona's method to engage was shaped towards engaging mature students. There is also a possible overlap with distance students, as he implies that these students are those who are distance learners and older adults in education (p.194). Additionally, Barcelona writes that online learning consists of three 'legs'; effective online instructors, a committed community of learners and the technology that supports distribution and collaboration (p.196). A combination of these three 'legs' makes online learning not only a suitable resource to reach 'hard to reach' students, but also an equal to face-to-face instruction. Key to Barcelona's support of online learning is that of its increased convenience, which is particularly prevalent in the contemporary technological age where computers and mobile devices are in the hands of most students.

Chapman, Parmar and Trotter (2007) state that 'mature students are a potentially large market, yet many mature students have different priorities to the 'traditional' undergraduate and require flexible programmes of study that combine well with their other commitments and life goals' (p.16). Chapman et al look at how the context of widening participation can be used to engage these sometimes, 'hard to reach' mature students who can sometimes require more support than their traditional undergraduate peers. They also state that universities have embraced the widening participation agenda and have subsequently attempted to widen the participation of all types of students. They carried out multiple focus groups that were based on their expectations of university life. In these focus groups mature students discussed both their positive and negative experiences of starting university. Chapman et al note that some students felt like they found it hard to integrate with the first year students (not wanting to travel or live in halls) and that there was not enough done to help integrate mature students. However, they also note that mature students attend university to better not only themselves but also their children, with one student stating that they went to university to show their children that 'nothing can stop you if you want it' (pp.17-18). Through their research, they found that mature students do suffer from issues that traditional students also suffer from, such as being given the right information.

Mai (2014) examines the use of technology, specifically mobile learning, in Higher Education based in Malaysia. He claims that 'hard to reach' students are 'adults who find it hard to attend classes on campus' (p.255) and therefore this has been placed within the Mature Students section. He continues to say that there are many advantages to integrating M-Learning and curriculum to support the education of these 'hard to reach' students, such as 'increas[ing] student engagement, collaboration, productivity, technology competency, innovation, and critical thinking' (p.257). Additionally, he explains that 'games for mobile phones have the potential to support both cognitive and socio-affective learning while aiding in the development of strategic thinking, planning, communication, application of numbers, negotiating skills, group decision making and



data handling' (p.257). The implementation and establishment of M-Learning in normal curriculum can only be successful if:

- There is 'faculty training regarding the capabilities of mobile technology and the potential use in the classroom';
- A 'resource page on the university website with recommendations for mobile applications that may be applicable to students' (p.260) is created; and
- There is encouragement to the computer science department or an outside resource to develop course-specific mobile applications that could be used for general education courses (p.260).

If educational institutions can successfully implement M-Learning into their curriculum they will effectively support these 'hard to reach' mature students to become engaged learners.

2.15 'Gays and Lesbians'

There are only two pieces of literature that fit this category. The text by Paul Wagg, which will be reviewed here, describes the 'hard to reach' group to include people who identify as gay and lesbian (p.5). Within this category there is also the previously discussed text from Craciun and Associates (1991), which describes the 'hard to reach' group as 'homosexuals'. From its low use within the 'hard to reach' literature it would suggest that the issue of sexuality has not been conceptualised often through the lens of being a 'hard to reach' student. In partial fulfilment of his EdD, Wagg (2013) investigated the transformative and reciprocal learning experiences of 'hard to reach' adult learners' engagement in learning. He states that 'hard to reach' may include sections or individual members of minority groups, such as minority ethnic people, people who identify as gay or lesbians, homeless people, marginalised people or groups, young offenders, undereducated learners and those who face mental health issues (p.2, 3 and 5). Therefore, Wagg's article features in multiple definitions in Figure 6. Wagg examines how it is possible that society has excluded these groups and reduced them to "otherness", which has subsequently led these groups to be deemed 'hard to reach' when in fact, it is possible that the groups Wagg outlines feel like that they have been pushed away. Wagg then examines whether the Prince's Trust initiative has been successful at engaging these 'hard to reach' students. The Prince's Trust was 'established in 1976 and currently runs seven programmes that are delivered throughout the UK through colleges and community learning centres' (p.2), which aim at encouraging young adults to be autonomous and responsible. The Trust educates and encourages students aged between 13-30 years old and who are struggling at school, at risk of being excluded, suffer from mental health issues and/ or have been in trouble with the law (p.2). He concludes by stating that although the type of education that the Trust provides can enable these 'hard to reach' groups to develop skills, it can also fail to provide them the means to 'critique a society which may have enabled and possibly constructed their disadvantageous social context and location' (p.131).

2.16 Single Parents

Cormack and Konidari (2007) authored another piece of literature that did not offer a method to engage 'hard to reach' students, but does offer a description of who they are. They state that 'groups such as disabled students, single parents and those from minority ethnic communities' are 'hard to reach' (p.93). Interestingly, this is the only piece of literature from the 101 that uses the description of single parents. Due to the other two descriptions offered, Cormack and Konidari



also feature within the BME and Disabled categories. The article explains that students from these 'hard to reach' groups will find it more difficult to volunteer, due to external commitments, but does not offer a method to engage them other than encouragement and subsequently this has not been categorised as having offered a method to engage them.

2.17 *Commuting Students*

Surprisingly, as they can be physically and geographically 'hard to reach,' commuting students were only mentioned once throughout the 101 pieces of literature. This mention comes from Jameson (1998) who evaluated the use of student support services in engaging these 'hard to reach' commuting students (p.141). She recommends that the creation of a Dispute Resolution Centre (DRC) would allow for commuting students to engage more with their studies and to be able to remedy any conflicts they have. Additionally, conflict resolution programs, such as electronic message boards or information fairs for commuters based on college campuses can allow for improved communication of important events for these students who may not be on campus for the majority of their time at university. The use of this student support service could take the form of peer mediation, the creation of a mediation office in which staff are the mediators, the multidoor centre where disputes are referred to the most appropriate service and the legal training clinic where law students are trained and act as mediators (p.130). These services would all positively contribute to engaging these 'hard to reach' students as they allow commuting students to solve their issues, similarly to how non-commuting students would.

2.18 *Technologically Advanced Students*

This review provided an interesting finding in one article identifying technologically advanced students as being 'hard to reach'. Rishi (2007) explains that Higher Education Institutions (HEIs) are lagging behind in communication with their students. He explains that 'contemporary students use a new and different model for communication and information access' (p.7) and subsequently, the sector is not keeping up with the best ways to communicate with their students. He further states that 'to bridge the communications gap, they must not only accept that the mobile revolution has indeed arrived but also better understand their options for effectively communicating with their students; (p.7). Rishi further continues to say that this has an impact on the learning of these students because they are now 'accustomed to a more interactive role in both communication and learning' (p.8) and institutions must now recognize 'the need for constant interaction and accept that mobile technology, especially mobile phones, might be among the best new tools to engage students in academics' (p.8). Rishi, however, does state that there are already some good examples of how HE institutions are implementing mobile phones in their communications, such as collecting mobile numbers to broadcast alerts and creating a mobile phone program, which aims at providing students with discounts on phones while delivering a range of academic and community value. (p.9). Overall, these students are becoming 'hard to reach' simply because the institutions are not keeping up with the evolving technological sphere that students are accelerating through with more and more haste.

2.19 *'Hard to reach' students outside of Higher Education*

The inclusion criteria set for this review meant that articles would be included that were outside Higher Education (see Figure 3), as long as they specifically discussed 'hard to reach' students.



This meant that some articles of particular note made it into the final review even though they fell outside of Higher Education. These will be discussed below with regard to the description they offered of the 'hard to reach' student and methods suggested to engage them.

Rudd and Zacharia (1998) examine how the implementation of health topics into adult literacy curriculum could engage 'hard to reach' groups of adult learners. They do not offer a definite description of who these 'hard to reach' adult learners are but allude to certain characteristics including disabled adults, immigrants, unemployed adults, incarcerated adults and homeless adults. However, they do offer a method to engage these 'hard to reach' students and that is through improving public health education. They explain that in 1993, the Commonwealth of Massachusetts made funding available to 'community-based adult education programs [sic] interested in addressing health topic in classroom activities' (p.4). This funding was delivered to 31 centres and 24 of them agreed to take part in the study, which produced 31 teachers that were willing to be interviewed about their experiences with incorporating health topics into the adult literacy curriculum (p.4-5). All teachers indicated that taught health topics included a focus on basic skills such as reading, writing, vocabulary and language (p.9), which possibly suggests that 'hard to reach' populations are those who are under-educated. However, importantly, the introduction of basic health education was seen as a success that is signified by the majority of teachers noting an increase in student motivation, confidence, self-esteem, self-empowerment, team building, unity, collaborative working relationships, engagement with the community, and taking healthful action for themselves (p.9).

Brener and Wilson (2001) describe their 'hard to reach' students as young people who are either at-risk of being expelled and/ or have a high risk of dropping out due to 'illegal activity or behavioural problems'. Brener and Wilson offer a methodological approach to determine the prevalence of this substance abuse. They discovered that 'nearly 48% percent of students used at least one substance on school property and 17 percent used more than one' (p.329). Furthermore, 'males were more likely than females and white students were more likely than black or Hispanic students' to use a substance on school property' (p.329). Therefore, they argue that 'administrators, public health practitioners, and policy makers' must work together to reduce substance abuse in this heterogeneous population. Brener and Wilson explain that due to large amounts of a child's time spent on school property, the fix to this substance abuse problem must begin at the school and this will eventually impact students outside of school and reduce the overall prevalence of this problem. Additionally, they argue that further research is needed to increase understanding of why students use substances while in school.

Peter (2009) examined the use of interactive pedagogy in reaching students who are young and suffer from 'learning difficulties' (p.1). Peter's interactive pedagogy is firmly placed within the foundations of drama and how it can bring together cognitive, affective and narrative structures to create a powerful learning experience for these 'hard to reach' students. She claims that drama pedagogues need to be active rather than reactive, whereby they wait for a "mythical point" where their students are ready for drama. By being an interactive drama pedagogue, it is 'possible to develop social understanding using an apprenticeship approach for all that harnesses play, which



is the natural way that children learn' (p.16). One of the major benefits of drama in Peter's eyes is that it is possible to create real life scenarios where these students can develop appropriate coping mechanisms among developing social and communication skills. This interactive pedagogy can therefore engage 'hard to reach' students in both community and educational life.

Another piece of literature that does not offer a description for who 'hard to reach' students are is Tally (1972). Although this article was written over 40 years ago, the method to engage 'hard to reach' students is just as prevalent today. For Tally, it is down to effective teaching to engage and educate the 'hard to reach'. She discovered the difficulty that teachers face when they are met with multiple children with different backgrounds in their classrooms and documents how she managed to turn her class from disliking English to enjoying it. She states that the first step in engaging her "slow readers" was to pick out books from the library that would match the child's reading ability. From this, she developed a 'points system' that would allow any child to gain a high grade for reading in her class, this instilled confidence and willingness in her students as they soon realised that they were achieving credit for contributing in class discussion and also by just bringing the book in and reading it. The next stage was to improve writing skills, which she combatted by making it clear to the students that as long as something was written, you would not fail. Key to this method was that Tally was committed to making these students better readers and writers by marking and handing back work the next day, allowing for children to work on their skills continuously. This fostered confidence and through effective teaching, all the children in her class were reading and writing at a higher level than they had been when they entered the classroom.

Out of the 101 articles reviewed in this report, Mitchell, Gray and Inchley (2015) are the only ones to mention female students as 'hard to reach'. However, the focus of this article is specifically on female students' lack of engagement in physical education (PE) at school. They explain that 'disengaged' in this situation was defined when 'they participated in PE some of the time or none of the time (rather than all of the time or most of the time)' (p.598). They asked female students why they do not engage in class and they predominantly gave negative answers, which included 'bored, stupid, angry, embarrassed, worried, sad, agitated or nervous' (p.598) and that this disengagement is often a combination of 'psychological, social and environmental barriers' (p.593). Mitchell et al examine the National Physical Activity programme that aimed at increasing physical activity and education in girls from Scottish second to fourth year secondary school students. (p.598). One of the main conclusions from this programme was that choice of activity opened up PE to these 'hard to reach' students and that having split gender PE classes also contributed to engaging these young female students.



3 Conclusions, implications and recommendations

3.1 Introduction

If there is a clear message from this study, it is that 'hard to reach' is a term that is used widely and in a range of education contexts but is ill-defined. There are benefits and drawbacks to this lack of clarity. On the positive side, the broadness of the term allows for it to operate as an umbrella term with a wide range of work all pulling in the same direction of increasing inclusivity and supporting learners who may otherwise be disadvantaged. However, the lack of precision does raise questions as to the usefulness of the term analytically. While this ambiguity potentially opens the door to misuse of the term and/or to shift blame onto students, this review found no examples of this occurring explicitly in the literature. A number of pieces reviewed appeared to use the term to 'other' students, suggesting that by virtue of a number of personal characteristics that students were perhaps deviant from the norm. The counter-point to this were studies that explicitly used the term in relation to pedagogy, access or the student experience, generally concepts that can be empirically explored.

3.2 Relevance of 'hard to reach'

As it was beyond the scope of this study to scrutinise the validity and reliability of the literature reviewed, the conclusions that certain groups or 'protected characteristics' are more greatly represented than others means only that. This study is not, for example, saying that 'BME students' and 'low SEC students' are the most 'hard to reach' given their prevalence in the literature, merely that they are the groups that have received the most attention thus far. Similarly, the absence of expected groups such as 'part-time students' does not imply they are more 'reached', rather that there is either a lack of research in this area or this group is not discussed with this specific terminology. What this does suggest is perhaps a rebalancing is required to ensure that this term is either more representative of a wider range of groups or that it does not become synonymous with widening participation, given the capacity for the term to have greater nuance (i.e. the geographically 'hard to reach'). Perhaps the under-representation of particular groups, such as commuters, reflects a limitation in either the functionality of the concept of 'hard to reach' or in the methodological scope of this study.

A key challenge for this review has been to delineate between which of the various definitions or interventions included were relevant to a Higher Education context. In some cases, we have included research as far back as Primary School because of the length of impact that becoming (or being seen as) 'hard to reach' can have. Particularly in definitions related to social alienation and or disaffection, access to HE or performing well once you reach this level can begin very early in life. As such, a key recommendation of this study is that widening participation programmes, particularly those which raise aspirations, are a central focus in 'reaching' students. An increase in support to normalise Higher Education (and education more broadly) as well as inspiring a desire for learning are necessary strategies for making a more inclusive HE. Similarly, good practice at secondary or FE level often has a clear overlap into HE, particularly when the focus is on creating inclusive learning environments. The fact that so much literature refers to BME or working class students as 'hard to reach' suggests there is still a long way to go before these students are have a cultural equivalence in Higher Education.



From the wider REACT project, it has become clear that many universities do not take a coherent approach to collecting or analysing data about their students' participation and engagement (Dunne et al 2017). The extensive use of 'hard to reach' in the field suggests a prevalence of an approach to students which is based on categorisation but potentially at odds with sector-wide calls for partnership and co-creation (e.g Healey et al 2014, Bovill et al 2011). If we are to resist a consumerist, transactional approach to Higher Education and work with students as partners then these opportunities cannot fall exclusively to the 'easy to reach' and that is a responsibility that must be addressed on an institutional scale. A more nuanced understanding of who their students are and why some may be 'hard to reach' is necessary for a rebalancing of the gaze of the institution. The rise of learner analytics may offer a solution, for example the work at the University of Derby which develops evidence-based interventions for BME students using such data (Sclater, Peasgood and Mullan 2016). The potential for learning analytics to provide a more joined up and nuanced individual understanding of the student experience chimes with our findings that technology is the most commonly used solution to engage 'hard to reach' students. A danger is that this runs the risk of increasing the categorisation that we have seen present in this review.

All this raises the question of why we use the term 'hard to reach' at all, why not increase the focus on who is doing 'the reaching' and why? In this vein, the Student Engagement Partnership calls for a move towards regarding unengaged students as 'not yet reached' (Goddard, 2017). A more student-centred approach may avoid the potential stigma attached to the term which could be alienating to students if they encounter it, particularly if it is either unexplained or used ambiguously.

3.3 Recommendations for using 'hard to reach'

Based upon the findings of this review, the authors recommend bearing the following considerations in mind when referring to students as 'hard to reach' in order to ensure the term is meaningful-

How has a group come to be labelled as 'hard to reach'?

This requires self-reflection by those using this term. We would encourage a greater consideration of the power relationships that are present in both labelling a student in this way and the various factors that may contribute to a student being deserving of this label. What aspects of a student's experience may be placing them in this category? These can be factors relating to teaching, the social experience at university or the responsibilities of the student outside of the university.

What evidence has been used to draw the conclusion that students are 'hard to reach'?

As a large number of the pieces reviewed here had no clear definition of 'hard to reach' students. Such usage runs the risk of assuming shared knowledge, which has the potential to stigmatise and further marginalise groups. We recommend a more empirically-driven approach which identifies students who are currently not included or who may need further support. We recommend all universities consider a more holistic approach to the data they collect about their



students' engagement including linking areas such as attainment, retention, background and extra-curricular participation.

What other terms may be used to describe the students in question?

A move away from using the term 'hard to reach' may resolve some of the issues we have raised here. This is particularly important as this term can be seen as putting the onus on the student. It is they who are 'hard to reach' rather than the institution or practitioner not reaching them appropriately.

One alternative is taking a holistic, nuanced and personal approach to understanding engagement and the fact that engagement can have a diversity of forms and sites (Shaw and Lowe, 2017). In a time of target-driven Higher Education (which arguably this review is contributing to) the right to choose your own level and form of engagement as a student should be protected. The responsibility of the institution is to offer inclusive practices, this implies better understanding of what motivates people to be engaged and strong communication in order to allow students to make informed choices to engage or not. This must be under-pinned by greater clarity about what we are engaging students in or what we mean by engagement (Buckley 2014), and there are inherent dangers in relying on a perceived shared understanding, as the ambiguity identified in this review demonstrates.



4 Reference List

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5 Appendix

Definitions of 'hard to reach' students

	BME	Low SEC	Young+	Disabled Students	Undereducated	Cultural Minorities	Offenders	Vulnerable or marginalised populations	Distance learners	Low motivation	Emotionally detached	Mature students	'Gays and Lesbians'	Single parents	Commuting students	Technologically advanced students
No Method Suggested	Orange	Orange	Orange		Orange					Orange	Orange		Orange	Orange	Orange	
Technology	Orange		Orange	Orange		Orange			Orange		Orange	Orange				Orange
Change Concept	Orange	Orange		Orange		Orange										
WP Initiatives	Orange	Orange	Orange	Orange	Orange	Orange				Orange		Orange	Orange	Orange		
Effective Teaching	Orange			Orange	Orange	Orange				Orange	Orange					
Interactive Pedagogy	Orange	Orange		Orange												
Online Learning			Orange	Orange					Orange			Orange				
Government Policy and Programme	Orange	Orange	Orange	Orange	Orange	Orange	Orange									
Civic Engagement		Orange	Orange	Orange		Orange	Orange	Orange								
Student Agency		Orange								Orange						
Student Support Services		Orange			Orange						Orange					
Change seating location in class										Orange						
Peer Learning							Orange			Orange						
Library Initiatives					Orange				Orange							

Methods to engage 'hard to reach' students





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