





# CONSTRUCTION AS A CAREER OF CHOICE FOR YOUNG PEOPLE

#### **Abstract**

Why construction is not a preferred career choice by young people and how the industry can look to change perception through promoting itself as a viable and attractive career option

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This report looks at why construction is not a preferred career choice by young people and how the industry can look to change perception through promoting itself as a viable and attractive career option.

Critical review looked to research existing work done on the topic to assess the current situation and utilise it for primary research using data from previous studies. From this, four chapters have been discussed (1) how young people make career choices (2) influences (3) perceptions of the industry (4) career aspirations. All highlight that there can be little doubt that construction has an image problem when being considered as a career prospect for young people.

A number of different contributing factors have been explored including age, attainment and enjoyment, influencers and perceived barriers many of which harvest negativity. Social media and new technology's role in campaigning and shaping young people's career aspirations have also been considered although it is clear more research is needed in this area.

Young people appear to be attracted to high profile careers some of which are new and specific to their generation's interests (e.g. You Tuber) responding well to recognition of success and talent. It is all about having a visible, high profile. Engineering does provide a glimmer of hope for the industry arguably due to increased STEM activity by schools.

Primary data was via focus groups with young people and based on opinion, experiences and perceptions. Findings reinforced literary review conclusions that construction is not a career of choice and long held perceptions of it being dirty, male orientated, unsafe and manual are still evident.

Young people are now more self-sufficient and informed due to increased ease of access to information 24 hours a day and although still rely on parents for guidance, they now utilise the internet and social media.

Surprisingly, young people do not associate construction with the resulting iconic buildings and structures and their unique and fascinating stories are not visible to young people.







From the research, a number of recommendations have been made, however they will not work unless industry, government and education work more collaboratively. The suggestion is that the CITB lead this reinvesting the training levy to engage with young people. This could also help improve information currently in the public domain, which is disjointed, duplicated and lacking in effective wayfinding.

An industry wide promotional campaign on mainstream media to gain interest, excitement and dispel myths targeted at young people and their influencers should be considered with the Royal Navy 'Made in...' campaign used by way of example.

A key opportunity for the industry is to work more with children of a younger age (primary) and consistently engage as they develop through the education system (from 6 to 16). By integrating education experts into construction companies to advise and assist, suitable programmes can be devised which would also fix an evident disjoint between education and the industry.

Other recommendations in the report cover areas investigated in more focused research including work needed to convince influencers that construction is a viable career option and provision of information to help them advise young people in order for them to make an informed decision. Similarly, when it comes to attracting minority groups, in particular women, into the industry there are on-going issues, which need more detailed consideration than this report has capacity to give.







# **Table of Contents**

1.	Glossary of Abbreviations and Definitions	4
2.	Acknowledgements	5
3.	Introduction	6
	3.1 Background and Problem	6
	3.2 Aims and Objectives	8
4.	Construction as a Career Choice: Literature Review	9
	4.1 How young people make career choices: theory	10
	4.2 Influences on young people's career choices	12
	4.2.1 Parents	13
	4.2.2 Educators	14
	4.2.3 Industry Engagement	15
	4.2.4 Modern Day Influences	16
	4.2.5 Diversity	
	4.2.6 Image of Apprenticeships	19
	4.3 What young people think of the industry	
	4.4 What do young people want to be and why?	
	4.5 Conclusion	24
5. Qualitative Research		26
	5.1 Methodology	26
	5.2 Results	27
	5.3 Conclusion	33
6.	Conclusion - What the Research tells us	36
7.	Recommendations	39
	7.1 CITB to reinvest the levy and co-ordinate a collaborative approach	39
	7.2 Invest in a creative, mainstream industry wide promotional campaign	40
	7.3 Investigate the influence of social media and how it can be utilised	42
	7.4 Engaging young people earlier	43
	7.5 Recruit Education Advisors to integrate education into the construction industry	44
8.	Other Areas for Consideration	46
	8.1 Traditional Influencers	46
	8.2 Diversity	46
	8.3 Image of Apprenticeships	47
	8.4 Feedback from Young People	48
9.	In Summary	49
10	). Areas for Further Research	50
	. Bibliography	
	2. Appendix	
14	Appeliuia	ວວ







### 1. Glossary of Abbreviations and Definitions

As the problem being researched is not a secular one, it is one which affects all elements of the industry and therefore the purpose of this research, the definition of construction is defined as in the Department for Business and Innovation Skills report "UK Construction: An Economic Analysis" (July 2013):

- i) the construction contracting industry
- ii) provision of construction related services
- iii) construction related products and materials

Although this appears to be too wide for any detailed study, upon further reading it will become clear that a collaborative approach is what is needed and not just within the wider construction arena. It is not therefore possible to start any meaningful research without firstly establishing the core of the problem and an overarching set of recommendations and proposals, which can then be filtered into more detailed and secular analysis.

#### **Abbreviations:**

BME: Black or Minority Ethnic

CABE: Chartered Association of Building Engineers

CIOB: Chartered Institute of Building

CITB: Construction Industry Training Board

NHBC: National House Building Council

NHMB: New Homes Marketing Board

OECD: The Organisations for Economic Co-operation and Development

STEM: Science, Technology, Engineering and Mathematics

UCATT: Union of Construction, Allied Trades and Technicians

UKCES: UK Commission for Employment and Skills







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#### 3. Introduction

#### 3.1 Background and Problem

The construction industry is one of the largest sectors in the UK economy contributing almost £90 billion (6.7%), comprising of over 280,000 businesses and covering some 2.93 million jobs, 10% of the UK's total employment figure (Department for Business Innovation & Skills, 2013)<sup>1</sup>.

In spite of the economic downturn and unprecedented challenges of 2008, the industry continues to be a vital sector in the UK economy with a vast amount of employment opportunities for young people. In 2015, the Construction Industry Training Board (CITB) <sup>2</sup> reported that the number of jobs in the industry had reached 2.1m, nearly 100,000 more than two years prior and at levels not seen since summer 2010. It went on to predict there would be a requirement of 232,000 jobs over the next five years as the industry continues to grow.

Given unprecedented levels of unemployment amongst young people (National Construction Board, 2009)<sup>3</sup> against high demand for labour, you would expect this to be a positive place for both the industry and the UK Economy. However, the construction industry is reported to be facing a skills shortage.

In the 2013, report cited above, the Department of Business Innovation and Skills reported that one fifth of jobs in wider construction related industries were persistent and hard to fill while the 'Skills to Build' report (2014)<sup>4</sup> identified training deficits in 23 of the 26 construction based occupation codes with evidence of shortages in both skilled trades and professional roles.

Why are we in this situation?

CITB data in 2013<sup>5</sup> found that the overall appeal of the construction industry as a career option had fallen to only '4.2 out of 10 among 14 to 19 year olds' and that same year, the Union of Construction, Allied Trades and Technicians (UCATT) also reported a 14.6% fall in construction apprenticeship numbers. This suggests that despite construction having a wide range of opportunities available for a diverse

<sup>&</sup>lt;sup>1</sup> UK Construction: An Economic Analysis of the Sector (July 2013)

<sup>&</sup>lt;sup>2</sup> Construction 2030 and Beyond: The Future of Jobs and Skills in the UK Construction Sector (2016)

<sup>&</sup>lt;sup>3</sup> Young People's Views on Finding out about Jobs and Careers, National Children's Bureau (2009)

<sup>&</sup>lt;sup>4</sup> London Chamber of Commerce and Industry / KMPG 'Skills to Build' report (2014)

<sup>&</sup>lt;sup>5</sup> UK Construction: An Economic Analysis of the Sector (July 2013)







range of young people, and a number of initiatives run across the industry to promote it as an industry for consideration, construction is just not a preferred career choice for young people.

This is a problem that the industry has faced repeatedly, widely documented as being due to an image problem with unreasonable and unrealistic images of what it is like to work in construction prevalent amongst young people. The fact that this has again remerged as a major problem facing the industry suggests that measures taken to date have not provided a long-term solution.

It is clear that more needs to be done to change perceptions on a company; industry and governmental level in order for there to be any real wide spread sustainable impact. In addition, it needs to be done quickly.

Not only are we fast approaching a time when skills needed to meet construction demand may not be available, concern has also been expressed by the industry that since Brexit, potential changes to the right of free movement provided by the EU, may impact further and place even more pressure in the need to increase UK workforce.







#### 3.2 Aims and Objectives

#### 3.2.1 Aims

This research will look at reasons behind negative perceptions and makes recommendations for how the industry can invest, inform and inspire young people to choose a career in construction, which will provide a sustainable labour pool and have a positive long-term effect on the industry's social impact.

#### 3.2.2 Objectives

- 1. Investigate what careers young people are attracted to and what influences their career choices
- 2. Investigate what young people think of the industry and whether it is an industry they would consider entering
- 3. Reference current initiatives and how government, education and the industry are working together to promote construction as a career
- 4. Review whether the industry is promoting itself in the most effective way to encourage young people to view it as a viable career option
- 5. Analyse and make recommendations







#### 4. Construction as a Career Choice: Literature Review

"Construction may not on the face of it be the most glamourous of arenas for superheroes and it may not grab the headlines but it is the glue that pulls everything together. Construction affects you whether you notice it or not every day. It can be central to an improvement in your life or an enabler from HS2, Crossrail and the Olympics down to local schools, hospitals and even your extension at home" Ben Pritchard, Invennt (2016)<sup>6</sup>

So why then did a You Gov poll<sup>7</sup> in 2015 find that 67% of the 2,000 people surveyed would never consider a career in construction with just 17% saying 'they'll give it a go' and 11% seeing it as exciting?

Construction United<sup>8</sup>, a coalition of some of the industry's leading companies and experts, have put it down to the fact there is a negative public perception of the construction sector. This is a view shared by a cross industry advisory panel hosted at this year's Construction Week, which highlighted that despite not being a new problem, it is a burning issue within the industry now<sup>9</sup>.

So despite numerous campaigning initiatives over the past 30 years including initiatives introduced in the 2004 Latham report and even further back in the Chartered Institute of Building's (CIOB) 'Constructing a Better Image' report 1996, there has been no significant advance in changing negative perceptions of construction and the lack of career attraction.

The Construction 2025 report (2013)<sup>10</sup> puts its perceived low image down to lack of gender diversity, low pay and job security. The Construction 2030 and Beyond report (2015)<sup>11</sup> also found the lack of technology and poor quality and health & safety records put people off working in an industry seen as dirty, strenuous and creating mess, traffic and inconvenience.

In contrast to this, the CIOB in 2014<sup>12</sup> outlined that further education construction courses are oversubscribed and 6,000 apprenticeship places received 40,000

<sup>&</sup>lt;sup>6</sup> Construction a Force for Good: recruiting the next generation - online article (2016)

<sup>&</sup>lt;sup>7</sup> YouGov.uk - Young Workers unaware of Construction Opportunities (2015)

<sup>&</sup>lt;sup>8</sup> National Infrastructure Plan for Skills report (2016)

<sup>&</sup>lt;sup>9</sup> Industry Calls From change of Mindset – article in Construction Week News (2016)

<sup>&</sup>lt;sup>10</sup> Industry Strategy: government and industry in partnership (July 2013)

<sup>11</sup> Construction 2030 and Beyond: The Future of Jobs and Skills in the UK Construction Sector, CITB (2015)

<sup>&</sup>lt;sup>12</sup> CITB: No More Lost Generations report (2014)







applicants. This suggests that interest in the industry may be improving and therefore the industry may finally be making a dent in perceptions among the younger generation – possibly a perfect time to look to introduce actions to capitalise on a more positive situation.

Despite this glimmer of hope, there is still a large gap in public perception of the realities of working in construction, which threatens to have a detrimental impact on construction's ability to recruit and retain people with the right skills through its negative impact on the views of young people of construction as a viable career choice. (UKCES, 2012)

#### 4.1 How young people make career choices: theory

When looking at how to attract young people into the construction industry, it is important to explore some of the ways in which they choose a career and what can have an influence on whether they see certain industries as a career they would choose to enter or not.

Marriott and Moore (2014)<sup>13</sup> in their report on recruitment of young people into the house building sector, discuss a number of career development theories, all of which they say are significant in young people's career choices highlighting that it is a wide area of debate and conflicting viewpoints. They outline a number of theories focusing on individual, cultural, social, environmental and external influences concluding that none can be taken in isolation, all needing to be considered when looking at different ways to influence career choice. This is not however a sector problem, this is one which affects the construction industry as a whole.

Marriott and Moore's report looks at a number of theories, which they suggest show that different interventions need to be used for different age groups when looking to attracting young people into the industry.

This could be because we take on multiple roles in our life that change, as we get older depending on self-perception, lifestyle requirements and external forces. It could be said, that traditional influences such as parents, decrease in importance as children get older. This suggests that trends in how young people source information and what appeals to them is an area the construction industry needs to consider and

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<sup>&</sup>lt;sup>13</sup> NHMB: Improving Recruitment of Young People into Home Building: a literature review (2014)







investigate further as they play a strong role in young people's perceptions (Online College, 2011).<sup>14</sup>

Ginzberg's theory of career development and Portfeli et al (2008), as referenced in Marriott and Moore's report, both refer to three life stages of career development giving an interesting perspective into how younger children make careers decisions suggesting fantasy plays a big part, a view supported more recently in a survey carried out by Constructaquote in 2015<sup>15</sup>. This report says that a third of construction workers interviewed were influenced into their careers by characters in films and TV, the most popular being Bob the Builder.

In contrast, older children take a more rational approach in their decision making when it comes to careers, relying more heavily on solid information rather than fantasy. This is known as the sequence approach (Howard and Walsh, 2010) <sup>16</sup>, which also outlines that children are able to identify an event, activity or situation that has guided them to a career choice and so become more aware of their decision making with less influence as they mature.

This difference in fact finding and levels of conscious information gathering suggests that there is a need to consider different communication channels for different age groups when trying to attract them into a career that aligns with the way in which they make their choices.

Jane Elliott (2013)<sup>17</sup>, after an analysis of essays written by 11 year olds in the 60's, observed a link between what they aspired to then and what they ended up doing when they were older. This suggest that young people change their approach in how they gain information on careers and their desire for a certain role does not necessarily change during this time. If industry can therefore identify aspirations at an early age, career appeal campaigns could be directed accordingly.

Another area of consideration is how young people's aspirations link to both their enjoyment of a subject and attainment of success (Alloway, 2004). Johnson (2013)<sup>18</sup> talks of Millennials<sup>19</sup> being accustomed to receiving praise meaning that they crave

<sup>&</sup>lt;sup>14</sup> Online College article – What Influences Your Career Choice? (2011)

<sup>&</sup>lt;sup>15</sup> Survey with 1,947 workers aged 18-55 polled. 31% admitted seeing characters on TV and film working in construction had an influence their choice of job

<sup>&</sup>lt;sup>16</sup> Referenced in Marriott & Moore (2014)W

<sup>&</sup>lt;sup>17</sup> Huffington Post article (2013) – Revealed: What kids want to be when they grow up

<sup>&</sup>lt;sup>18</sup> Attracting Young People into Construction Field Positions report (2013)

<sup>&</sup>lt;sup>19</sup> Millennial - a person reaching young adulthood around the year 2000







accolade. The Engineering UK Report 2015 also focuses on attainment as a driver in increasing the likelihood of children pursing certain subjects or career furthers. This view is supported in an online article on the recruitment company Reed's website, which focused on GenZ and what they wanted to be when they grew up<sup>20</sup> - "My daddy said I would make an excellent Engineer and buys me lots of Lego to practice. Girls are better than boys are at science; they listen more and can draw neater. You have to work hard to be an Engineer, but you get to do different things every day".

The above discusses a few theories on how young people make career decisions. Marriot & Moore's report expands on this and provides some interesting research when looking at attracting young people into the industry, most of which should not be seen as exclusive to the home building sector.

#### 4.2 Influences on young people's career choices

Young people gain information and perceptions of careers from a number of different sources as they move from a young age to choosing their options, much of which is via different influencers who instil their views onto them both consciously and unconsciously.

Most research suggests there is a general lack of knowledge of opportunities, career paths and progression routes and negative perceptions of the construction industry amongst key influencers. Views held are that the industry is one that is difficult to work in with poor working conditions, a lack of job security, training and career progression that leads to them giving preference to more visible academic routes, which they do not see as being available within construction.<sup>21</sup>

CITB in 2013 found that construction as a career option rated poorly against other industries scoring 6.2 out of 10 by parents and 5.6 out of 10 by careers advisors with roles in the industry seen as being outdoors, dirty and most suited to young people who could not get into higher education. Such negative perceptions and lack of knowledge of the industry can only have a detrimental effect on a young person's perception and so needs further exploration. This also suggests that changing young people's perceptions is not something which should be done in isolation and that the

<sup>&</sup>lt;sup>20</sup> Gen Z - children born after the start of the Millennium

<sup>&</sup>lt;sup>21</sup> Chan and Connolly (2006) / Article on UK Essays website (2013) / Qualifax article (2016) The Parent's Role in Career Selection







pre-conceived views of those who can have an influence on their decisions need challenging.

The main influencers on a young person's career choice are traditionally noted as being parents, teachers and careers advisors. However, other influences also need to be looked at including new technologies, diversity and the image of apprenticeships, which are currently under heighted focus with the launch of the government's apprenticeship levy and inclusion in section 106 requirements.

#### 4.2.1 Parents

Parents may not be aware they are having an influence on their child's choice of career. In some cases, they can also deliberately influence them onto certain careers due to expectations of their child's career and education and perceptions of different jobs.

The Association of Colleges (2014)<sup>22</sup> found that for pupils aged 11 to 16, parents are the most popular source of advice (70%). Two years before that, City and Guilds (2012) <sup>23</sup> reported that for 16 to 18 year olds, their influence decreases which, as mentioned earlier in the report, gives rise to the view that influence from different sources change as children grow older.

The NHBC Foundation in 2016 warned that four in ten parents would not encourage youngsters to consider careers in the house building trade suggesting that this was due to parental aspirations for their children and their perceptions of the status of the industry not matching what they feel their children can achieve. The main aspirations parents were found to have for their children were good pay (60%), career progression and for them to be doing something worthwhile (51%). All things, which are not accessible through a career in construction if you have a stereotypical, negative view of the industry. It would have been interesting to see how this compared to aspirations held by their children.

Contrasted to this, the Transport Infrastructure Skills Strategy 2016 states that parents have a positive view of engineering, showing that perhaps not all roles within the industry are viewed negatively. It must however be noted that this study was focused on infrastructure projects and that their perception may have been different

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<sup>&</sup>lt;sup>22</sup> Freshminds Report (2014)

<sup>&</sup>lt;sup>23</sup> Ways into Work: views of children and young people on education and employment report (2012)







had engineering been discussed in the context of general construction projects. This does raise the question as to the knowledge parents have on the different roles within construction. Do they see engineering as part of the construction industry or a separate career held in higher regard?

Considering this, it is evident that the industry needs to educate parents about construction, related occupations and the benefits of a career in the industry to change negative perceptions, align aspirations and help them inform and educate their children. Gale (1994) suggests this is a deep-seated issue yet to be properly addressed. A view that appears well founded considering it is still a topic of discussion over 20 years later.

#### 4.2.2 Educators

With reference to the CITB's Educating the Educators report 2014, for the purpose of this study, teachers and careers advisors, both of which had the power to influence careers choices have been considered together under the broader category of 'educators'.

Following the government transfer of legal responsibility for the provision of careers advice from local authorities to schools in September 2012, concerns have been raised that there has been a decline in quality of this advice<sup>24</sup>. In June 2014, Unison<sup>25</sup> published research that out of 700 secondary schools, 83% of schools were no longer employing a careers adviser. Two years before this, Ofsted<sup>26</sup> had found that three quarters of schools were not implementing their duty to provide impartial careers advice effectively.

Reduced time and resource for careers advice could be seen as providing less opportunity to develop a more in-depth and informed understanding of various occupational sectors available and could lead to possibly bias personal views being passed on to young people. Not helpful according to the CITB (2014)<sup>27</sup> which found that the perception of Careers Advisors and Teachers of the construction industry focused on stereotypical images of craft and trade roles, which are hard work and achieve only low pay.

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<sup>&</sup>lt;sup>24</sup> Coffait 2013 / HoC Education Committee 2013 / Ofsted 2013 / Holman 2014

<sup>&</sup>lt;sup>25</sup> Union Briefing August 2014 – The Careers Service: The Governments Elephant in the Room

<sup>&</sup>lt;sup>26</sup> Going in the Right Direction: careers guidance in schools from September 2012 report (2013)

<sup>&</sup>lt;sup>27</sup> CITB Educating the Educators report (2014)







A Pye Tait survey (2014)<sup>28</sup> found 35% of careers advisors believed construction to be an unattractive career opportunity with 60% not providing information on job prospects based on available work. Such negative views could therefore be leading to construction not being promoted to young people by their influencers.

Whether or not this truly could have an influence of young people's perceptions of construction is an area of debate. Reed in Partnership (2015)<sup>29</sup> found just 8% of young people believed formal careers advice was a useful service instead parents, websites, teachers and friends as the most influential sources.

There is also an argument that educators, in particular teachers, are more focused on concentrating on academic achievement and encouraging pupils to enter University, which, while potentially good news for professional occupations, is not good for practical roles where a large portion of the skills shortage lies.

It is not just educator's views that can have an effect on career choice. The Association of Colleges in 2012<sup>30</sup> found 82% of teachers do not have the knowledge to inform student of careers opportunities in the industry while 44% admitted giving ill-informed advice, a situation also highlighted as an area of concern in the 'Skills to Build' report (2014). The Educating the Educators report (2012) found that teachers and careers advisors are aware of the gap in knowledge and do want assistance and support to help fill it, a positive finding that should be seen as a window of opportunity for change.

It is clear that teachers and career advisors lack awareness of construction as a career and, similarly to parents, this indicates that more needs to be done to challenge their perceptions of the industry and educate them order for them to inspire and inform pupils. It would be interesting to see how much progress has been made in this area since recommendations made the CITB's 'Educating the Educators' report 4 years ago.

#### 4.2.3 Industry Engagement

Research has found that employers can have a positive impact on careers choices if they engage in the right way. Mann et al (2013)<sup>31</sup> found meetings, work experience,

<sup>&</sup>lt;sup>28</sup> Pye Tait survey for CITB (2014)

<sup>&</sup>lt;sup>29</sup> Reed in Partnership, Young People and Employment, UK Survey (2015)

<sup>30</sup> CITB Educating the Educators report (2014)

<sup>31</sup> NHBC Literary Review: improving recruitment of young people into home building (Marriott & Moore 2014)







taster days and career talks from businesses rated higher in impact (57%) than family, friends, websites, books and media (34%). This reinforces views expressed in the OECD Learning for Jobs report 2010, which placed high value information on jobs and careers obtained in real workplace and through contact with working people.

The London Ambitions<sup>32</sup> programme looks to 'set out a pragmatic way to tackle some of the challenges that young people face when trying to make the right career choices' stating that the role of employers is key in achieving this. One of the elements, which it has introduced to achieve this, is that every young Londoner should have completed at least 100 hours' experience of the world of work by the time they reach the age of 16. The challenge in meeting this when it comes to the construction industry, is ensuring that employers know how they can have an effective impact.

Although employer engagement with schools by the construction industry is heavily utilised, the Engineering 2015 report states that many employers find difficulty in understanding how best to effectively engage with young people citing a lack of interest, guidance and support from educational institutions. In response to their findings, 'Tomorrow's Engineer'<sup>33</sup> was designed to address the concern shown and provide guidance on a regional basis for employers carrying out the engagement activities. It will be interesting to see the results and to see how relevant it would be if applied to the whole industry.

Perhaps something for the wider construction industry to consider is to look at ways in which it can collaborate to help organisations learn how best to approach familiarising young people and their influencers with the construction environment. This potentially will help dispel some of the myths surrounding the industry and promote it as a viable career choice.

#### 4.2.4 Modern Day Influences

Landing the perfect job has traditionally relied on good advice from teachers or career guidance professionals however, the way young people make decisions

<sup>32</sup> https://londonambitionsportal.london.gov.uk/

<sup>33</sup> https://www.tomorrowsengineers.org.uk/







about their future has changed as they increasingly turn to social media (The Telegraph, 2015).34

This is not a new observation. Reid and Cominetti (2013)<sup>35</sup> looked at traditional influencers but also took into consideration careers websites and social media noting them "as a source of influence that these days can't be neglected from any study on influences on a young person's careers choices".

Not only are other, more modern methods of careers advice used by young people but their use increases as they age and have less access to more traditional form of influence and information such as teachers and parents. This supports earlier discussions about career aspirations and influences across different age groups.

It could be argued that use of different sources of information and influence is also a generational thing. Dubbed the "self-service" generation<sup>36</sup>, recent market research outlined in the Telegraph article previously referenced, found that 27% of today's young people use Google for careers information, 15% You Tube and 12% use other forms of social media. Significantly, just a third of young people interviewed said they seek help from a careers adviser.

This is something for the construction industry to give high priority as it competes for young people's attention with other industries, many of which are already incorporating new technology and media in their recruitment strategies.

Entrepreneur Edwina Dunn is spearheading the 'Your Life' campaign<sup>37</sup> directly targeting young people with careers advice through a government backed YouTube channel, which looks to encourage teenagers into STEM careers such as Engineering.

To date however, there is little in-depth research in this area although it is visibly clear from looking at social media itself, how popular it is as a source of information and influence amongst young people of today and their influencers.

<sup>&</sup>lt;sup>34</sup> The Telegraph article: Generation YouTube: the young people turning to the internet for careers advice (6 October 2015)

<sup>&</sup>lt;sup>35</sup> The Work Foundation - Aspirations and Experience Report from Youth Insight survey with KFC (Oct 2013)

<sup>&</sup>lt;sup>36</sup> Use of the internet and mobile devices for communication, life management, and decision-making. Users have an unprecedented sophistication in using data for personal decisions. Many have grown up with technology at their fingertips and believe instant access to information is a right. Stephanie Miller (2012) Digital Marketing & CRM Expert. <sup>37</sup> http://www.yourlife.org.uk/







#### 4.2.5 Diversity

Marriott and Moore's (2014) outline a number of barriers to entry which they argue have a negative effect on young people when making their careers choice, much of which is down to the perceptions of particular industries and their accessibility.

You cannot look at young people's perception of construction as a career without recognising that there is a massive gap in the number of men and women working in the industry. In 2014, only 11% of workers in the wider construction sector were women with only 1% in trade roles (Huffington Post article, 2014).<sup>38</sup>

There are many studies looking into why women are not entering the industry, an issue that the industry seems not to have been able to solve despite proactive measures in recent years such as the introduction of Women in Construction and the #notjustforboys campaign. Agapiou (2002), <sup>39</sup> through semi structured interviews, found the main barriers to women entering the industry were the perceived physical nature of the work, social dynamic of working in a male-orientated environment and lack of availability of career paths – more evidence of a wider image problem. Most interesting about Agapiou's study is that she says main influencers in careers choice could challenge these views if they have the information and knowledge necessary.

The importance of provision of information is also noted in the Construction Skills report (2007) which found gender stereotypes exist and are embedded but can be broken down by providing information on details of work, pay and lifestyle. The University of Warwick (2010) recommended focusing on the promotion of STEM subjects while Francis and Prosser (2014) 40 suggested providing careers advisors with greater knowledge about women's experience in construction to help combat low entry levels.

Much of the research into low levels of black or minority ethnic (BME) workers employed in the construction industry is very similar in its outcomes and the recommendations made on how to attract women into construction. Chaudhry 2010,

<sup>&</sup>lt;sup>38</sup> Huffington post article: Building the Future – Women in Construction (23 May 2014)

<sup>&</sup>lt;sup>39</sup> Referenced in Ginige, Amaratunge and Haigh – Improving Construction Industry Image to Enhance Women Representation in the Industry Workforce (2007)

<sup>&</sup>lt;sup>40</sup> Referenced in the Engineering 2015 Report







CABRE 2006, and Ahmed et al 2008 all acknowledge that image is the greatest barrier and recommend use of role models and targeted material.

It is clear that the industry needs to recognise that in order to reduce gender and diversity barriers there is a need for more targeted campaigns and information provision to gain interest and promote the industry as all-inclusive. The Equality and Human Rights Commission in 2011 recommended the best way to do this is to increase the knowledge pool, utilise construction management to work together to challenge the bias, provide training in diversity and improve communications and media.

#### 4.2.6 Image of Apprenticeships

Apprenticeships are one of the major pipelines in the industry but as discussed earlier, uptake and completions are declining. Not a positive introduction to the new Apprenticeship Levy launching in 2017, or to the high level of focus placed on this as a suitable training scheme indicative from section 106 obligations and higher government targets.

Despite the increase in availability these provisions bring, as well as increased employer commitment to training, the fall in apprenticeship take-ups is substantial from 22,000 in 2008/09 to 16,000 in 2011/12. The drop in completions in construction related industries has increased over the last three years, while completions in other sectors increases Construction 2025 (2013). This suggests that, even when the industry does manage to attract young people into an apprenticeship, either they are just choosing it as a temporary measure until something better comes along or the industry is not fulfilling their expectations or requirements for a career.

The Working Links report (2011)<sup>41</sup> supports the view that lack of uptake of apprenticeships is an image problem with 33.7% of those surveyed believing that jobs in construction were only for people who are good at hands-on work.

Tomlinson (2004) states this could be due to the lack of support for apprenticeship routes into the industry by influencers and the government, with preference given to academic rather than vocational skills due to incentives offered to schools for pupils attaining academic success, including sixth form places and university intake. The

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<sup>&</sup>lt;sup>41</sup> Work-based learning inspection report for Ofsted (2011)







issue is not singular to the industry but it certainly has an effect, especially when it runs so closely to the negative industry perception that young people have. In contrast, Batterham and Levesley (2011) 42 have a more positive outlook saying that 37% of parents surveyed support the apprenticeship route compared to 60% for a more traditional route, higher than you would expect given the views above. They did however believe, as already mentioned, that better information, advice and guidance is needed to challenge negative views.

#### 4.3 What young people think of the Industry

A survey by YouGov in 2015<sup>43</sup> found that just 3% of 18-24 year olds (1% female) have actively searched for a role in the construction industry, a lot lower than for other industries such as retail, hospitality, travel, leisure and education. Why is this?

Marriot and Moore (2014) 44 report that the majority of young people perceive construction as low status, dirty and badly paid with the few pupils that were attracted to construction choosing it because they want to work with their hands, reinforcing the deep-seated view that the industry is characterised by manual work.

They also found that there was a lack of awareness of opportunities and that activity undertaken at school is not associated with those relevant to construction careers.

This view has stigmatised the industry for years. Maynard (2004) reported that fewer young people considered construction as career choice, as they believe jobs are hard and dirty, giving preference to other, cleaner fields - in particular, new technology. More recently, the Skills to Build report (2014) portrays a very similar view; that young people associate the industry with trade roles, difficult working conditions and low pay and that it has been stereotyped as appropriate for certain type of people – mainly working class males.

In the 2015 YouGov survey referenced above, 45% of young people considered the industry as mainly targeted to men, while 25% believed that jobs in the industry are not secure, possibly due to the economic downturn of recent times. This, as well as other factors, make it an undesirable industry to work in according to one in five (19%) of those surveyed.

<sup>&</sup>lt;sup>42</sup> Survey of 1,620 young people aged between 15 and 19, and 1,693 parents' views of vocational qualifications

<sup>&</sup>lt;sup>43</sup> YouGov.uk - Young Workers Unaware of Construction Opportunities (2015)

<sup>&</sup>lt;sup>44</sup> Referenced in NHBC's Literature review: improving recruitment of young people into home building (Marriott, & Moore 2014)







Perhaps one glimmer of light is engineering. The Engineering UK brand monitoring report of 2015 found there was an uptake in interest of it as a career of consideration, with more positive perceptions from parents, young people and teachers perhaps due to the increase of focus on STEM subjects in recent years. However, gender differences were still prevalent, with more boys than girls of secondary age considering a career in engineering.

Only 11% of the UK construction industry workforce are women and just 7% chartered engineers (Smith Institute, 2014)<sup>45</sup>, and so a large number of roles and professions are not reflected in careers advice and promotional activity. This plus lack of understanding of the different opportunities for young people and their advisors, is it any wonder young girls have such a negative perception of construction as a career and that the industry is struggling to gain their interest?

Chan & Connolly (2006) suggest that industry image is not helped by the attraction of other careers, which are seen as more appealing and as providing the benefits young people want, which the stereotypical image of construction work does not appear to provide. They found that careers advisors saw the problem being the attraction with 'pop star wages and pop star style' rather than being about 'get dirty, get your gear covered in dirt'. This in itself is of interest. However, what is probably more interesting here is that the career advisors automatically referenced construction in this way.

#### 4.4 What do young people want to be and why?

In order to increase the appeal of a career in construction it is perhaps useful to look at which careers young people are attracted to and why.

The British Youth Council, National Children's Bureau and Young National Children's Bureau in 2008 stated that, unlike common stereotypes that all young people want to be celebrities or work in politics or media (in contrast to the point above), there was more depth and range to young people's aspirations. You would expect this to be a positive find for an industry with so many different career options, however, only six of the two hundred surveyed mentioned a job in construction and even those were not specific to the industry (e.g. Engineer, Project Manager and Environmentalist).

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<sup>&</sup>lt;sup>45</sup> Building the Future: Women in Construction. The Smith Institute (2014)







In contrast, Keith Perry, in an article for the Telegraph (2014)<sup>46</sup>, found that the top two choices for young people were to be 'rich' and 'famous' which could be attributed to the rise in popularity of reality TV and the success that is attributed to these two factors. There was no mention of any construction related roles in the survey, perhaps the most worrying result of which was that a more popular choice (6%) was that they 'just don't want to work'.

Generational change and the impact of less traditional forms of influence is discussed in the results of a One Poll survey in 2014.47 Here, the top five jobs for children were Videogame Designer, Drummer, DJ, Footballer and Make-up Artist, all high profile careers across social media suggesting a high level of media influence in more modern day career choices.

The inclusion of new careers is developing more rapidly with every year. This year, two years after the survey above, in a study commissioned by Curry's PC World<sup>48</sup>, modern youngsters aspired to being writers, bloggers and You Tube sensations, all of which are now more popular than traditional careers such as teaching and medicine. It is interesting how there is more focus on creative industries at a time when schools are focusing less on them.

Michael Cheary's (2016) 49 research into GenZ in contrast found more traditional careers are becoming popular, with Engineering included within the top five for both boys and girls. It is interesting that Engineer as a career role came up for both. Builder also came up as a top career choice for the boys and it would have been interesting to see how they defined that job role and why it has become popular as a choice of career. Could it be due to active promotion by the industry, an increase of visibility with more construction activity, higher profile and positive image on TV shows such as DIY SOS? Or, is it through recent media coverage of the high wages 'builders' make due to lack of available skilled workforce?

Susan Adams (2015)<sup>50</sup> had very similar responses with her research. Top choice for boys was professional athlete but sports did not feature for the girl's top list, which Adams suggests, is due to a lack of exposure. This is interesting as in a comparative

<sup>47</sup> What Kids want to be when they Grow Up article (8 Jan 2014)
<sup>48</sup> Results: 1<sup>st</sup>- Writer; 2<sup>nd</sup> - You Tube sensation; 3<sup>rd</sup> – Artist; 4<sup>th</sup> – Photographer; 5<sup>th</sup> - Clothes Designer

<sup>&</sup>lt;sup>46</sup> VoucherCodesPro.co.uk survey with 1,300 parents of children between five and ten years' old (2014)

<sup>&</sup>lt;sup>49</sup> Results: Girls - Vet, Teacher, Engineer, Doctor and Baker. Boys - Footballer, Inventor, Policeman, Builder and Engineer.

<sup>&</sup>lt;sup>50</sup> Referenced in Forbes article: What kids in 2015 want to be when they grow up based on nationwide survey of 500 children aged between 1-10







survey conducted by Mothercare in 2013; fourth choice of career for girls was footballer, which the report attributes to the English women's team performance at the 2012 Olympics. Two years later, Susan Adams research contradicts this suggesting that young people's loyalty to a career is fickle and influenced by high profile exposure, showing the requirement for consistent messaging and image reinforcement to maintain interest and engagement.

The fact that these two studies highlight differences in what girls and boys want to be shows gender is an important factor when looking at how to make construction an attractive option. The girl's choice of engineering in Michael Cheary's research for example was due to creativity, love of technology and a desire to study hard.

Unfortunately, the study did not give comparative views from the boys however; it is likely that it would have differed.

Age is another factor that seems to influence career decisions. As discussed earlier in this report, it is an important consideration as many young people change their minds as they age and become exposed to more influences leading them to start shaping their own opinions. Adams (2015) discovered that the top profession for ages 3-4 was super hero (or a dinosaur!), while engineering came in the top three for ages 7 to 8 but at under 3%. There is no indication as to why but it does support earlier discussions that different ages need different interventions.

There is still an attraction to more traditional careers such as firefighter, doctor, nurse; police officer, which Ben Pritchard suggests is due to the perception of doing things for the wellbeing of others and the pride that it leads to. He makes a valid point asking why this cannot include construction work. One of the main rewards people within the industry say they get from their work is the benefit to the community, seeing the finished product and having pride in contributing to it.

There are also a large number of young people who do not know what they want to do for a career. The BYC, NCB and Young NCB (2008) found that 66.1% of young people have an ideal job already in mind for the future although a third were unsure about what they want to do. More recently, Susan Adams also noted from her studies that 'Don't Know' featured highly as a response. Possibly a great opportunity for the industry to engage with those young people who would benefit from further intervention and information on career options and the range of roles available.







#### 4.5 Conclusion

There is no doubt that despite being one of the largest and fastest growing sectors in the UK economy, construction has an image problem when it comes to being considered as an attractive career prospect for young people. This is highlighted in a vast amount of studies both historically and more recent. Taking into consideration different factors on career choices and the role of different influencers, it is important to understand why this is, and in what ways perceptions can be challenged.

A number of studies focus on different influencers including parents, teachers and careers advisors, highlighting they too have negative perceptions of construction as a choice, largely due to lack of knowledge and information and arguably also because they focus on other industries which facilitate more academic subjects.

Other influences, which also have an impact on young people's choice of career and their perceptions of construction, include not enough effective and informed employer intervention, as well as barriers to entry such as diversity and perceptions of the value of apprenticeships. Perhaps an area of influence which, is not as widely researched, is the effect of social media and new technologies. Both are increasingly important both in terms of campaigning and in shaping young people's career aspirations and are important areas for further study. Study on the effect of industry promotion and media campaigns is also an area for further research although it could be argued there is very little available to research in terms of mainstream campaigns.

It is evident from some of the research that the perception of construction as an attractive career option is low and that stereotypical images of the industry and roles within it still characterise young people's perceptions. The industry would certainly benefit from a large-scale study to analyse the change in perceptions of construction through key stages and by gender.

Research suggests young people of different ages need to be targeted differently, younger children with the use of fantasy and older children, through the provision of information to help them make informed decisions.

Perhaps the only area of industry where perceptions are more positive is engineering, which could be attributed to the expansion in school engagement







activity focusing on improving the enjoyment of STEM subjects, as well as effective careers guidance linked to the curriculum. Considering this, research into other industries, and what makes them attractive, would give a more in-depth insight into what children want to do for a career. This in turn will feed into how to attract them into the industry.

Young people appear to look at careers that are influenced by modern day life and perceptions of what is successful. They respond well to recognition of success and talent, as well as a high level of exposure to the career options available. Wellbeing of others and promotion of impact on society also seem to feature heavily in what appeals to them – all of this needs to be taken into consideration when initiating engagement activity.







#### 5. Qualitative Research

#### 5.1 Methodology

The collection of primary data via qualitative research looked to gain feedback based on opinion, experiences and perceptions of the construction industry as a viable career option among children aged 9-13 years.

Data was collected from 100 children in years 5 to 8 (ages 9 to 13) from four schools based in southwest London and was recorded via notes taken and copies of any documents the children are asked to complete.

This age group was chosen to establish whether there is any difference in perceptions and career aspirations in the gap period between primary and secondary age groups. It focused on younger students before they become involved with careers options and exams following findings from literature research that influences on a child's career choice start from an early age. This would suggest that earlier intervention might be a solution towards changing perceptions and desire to enter the industry.

The location of the schools was chosen due to ease of access, previous contacts from prior engagement activity and through contacts at Wandsworth Council's Economic Development Team.

Focus groups were managed with no intervention, no indication as to what the activities were about until the end to allow for impartial feedback. Set questions were designed to keep open dialogue.

The sessions ran for between 45-60 minutes depending on the group's attention span.

The plan had been to engage five schools and a minimum of 200 pupils before the schools break for summer at the end of July. However, given the short time frame available, the process was not as easy as originally presumed. Initial contact was limited to contacts within the Wandsworth, Lambeth and Westminster areas through direct contact and local council. However, it was hard to get a response from







schools, or for them to fit in time to facilitate the focus groups despite it being only 45 minutes to an hour long. This however is useful as it highlights a problem that could have an impact on the engagement with schools.

One school booked sessions however failed to confirm and so the focus group never took place. Another school booked sessions but it was the wrong age group, something not realised until the session had begun. The findings from these groups have not been included in the results although they did serve to support many of the findings.

#### 5.2 Results

For a full list of results go to Appendix A.

#### Question 1 - What do you want to do for a career when you are older?

This question looked to investigate which careers the students were attracted to and to establish how popular construction related careers are. Participants were asked to write down the career they wanted to do when they 'grow up', with the option to include more than one career choice where they had few options they were considering and to put 'Don't Know' if unsure.

#### Top five included:

- 1<sup>st</sup> Entertainer (e.g. dancer, singer, actor) 14%
- 2<sup>nd</sup> Sportsperson (e.g. footballer, rugby player, athlete, tennis player) 10%
- 3<sup>rd</sup> Doctor 10%
- 4<sup>th</sup> Teacher 6%
- 5<sup>th</sup> Don't Know 5%

The same top five careers came up for both the primary and secondary age groups with differences in popularity of other careers following that.

Only three construction related roles came up in the research - Engineer (3%), Builder (1%) and Carpenter (1%) with Architect (2%) and Interior Designer (1%) from the wider built environment.







Those who picked Engineer stated it was because they enjoyed the subjects while builder and carpenters were picked because the pupils believed they are good with their hands.

Interestingly, new careers were mentioned, one of which, You Tuber, appears to be a common choice and a well-known profession in modern day society

Question 2 – Why do you want to do the job you have chosen when you are older? This question looks to assess what is important to young people when choosing a career, establishing what attracts them and introducing influencers in their decision.

Students were asked to write their response down on their sheet of paper and were allowed to choose more than one reason.

#### Top five reasons included:

- 1<sup>st</sup> Enjoy the subject/related activity 29%
- 2<sup>nd</sup> To help people 17%
- 3<sup>rd</sup> Looks fun or interesting 10%
- 4<sup>th</sup> Because I'm good at it 7%
- 5th Makes money or pays well / to help animals 6%

With secondary school pupils, this question was expanded on this to see if their views had changed since primary school. 42% said yes their choice had changed; 55% said that it had not and 4% could not remember.

Reasons given for the change in mind included:

- They no longer enjoyed the related activity/subject
- They didn't think they could do the job
- Found out about other options and liked those more
- Started new subjects they found more interesting
- Decided the role would be boring
- Doesn't pay enough money
- Because they were told they were better at something else
- Because it was not realistic "A dinosaur and the sugar plum fairy!







# Question 3 – Which of the following have helped you choose what you want to do when you are older?

This question looked to assess external influences in young people's career choices to ascertain where the industry might also need to focus in terms of changing perceptions and providing information.

The students were given the following choices and asked to list their top three on a sheet of paper. Any that they thought which should go on which were not on there they were asked to note at the bottom under 'Other'.

#### Results:

- 1st Parents 29%
- $2^{nd}$  TV 19%
- 3rd Friends / Internet 13%
- 4<sup>th</sup> Family 11%
- 5<sup>th</sup> Social Media / Teacher 7%
- 6<sup>th</sup> Careers Advisors 2%

Other influences that were stated included books, specific family members (siblings, brother, cousin), people who do the job and 'myself'.

There was less input from secondary pupils for this question. When asked some of the pupils stated that they were their own influence.

None of the secondary school pupils believed their family had an influence in their decision. Careers Advisors were not listed when working with primary school students as they don't have them.

#### Question 4 – What words do you think of when you think of construction?

This question looked to determine knowledge and perception of construction as a general term as a prequel to following questions on construction careers.

For some groups this was carried out verbally, others written as group work depending on attention!







There is a wide range of words associated with the term none of which really focused on jobs. These were more negative than positive and not many of them were emotive, they were very matter of fact. There was little excitement about the term when talking about it with the students.

On further discussion, many of the students did not see construction as a progression from building site to the end product – they disassociated it, which is interesting and was unexpected.

Interest was piqued when discussing different projects Sir Robert McAlpine worked on such as the Olympic Stadium – "wow, so cool"!

One of the most popular words, which came up with every group, was "dangerous".

#### Question 5 – What jobs do you think there are in construction?

This question looked to gain an insight into students' knowledge of the range of job opportunities available within the industry.

For some groups this was carried out verbally, others written as group work depending on attention!

Most of the roles discussed were trade and site based roles, less focus on technical or management ones. Some technical roles were mentioned but the students were not sure what the role entailed (e.g. Planner). Crane driver was a popular choice.

The students had a better understanding of the range of roles than expected but pupils were surprised when presented with the fact there were over 150 opportunities and not all of these worked on construction sites. They were also surprised to hear that I worked in Construction.

"But you're not wearing a hard hat"

"But you're a woman"

"You look like you work in TV or something"

#### Question 6 – What do you think it's like working in construction?

This question was used to assess perceptions of working in the industry to see if the perceptions of working environment is one of the barriers to attraction.







The response was very negative. The students could not see any benefits to working in construction and held stereotypical images that have dogged the industry for years. It is seen as boring, dangerous, dirty, hard work, long days and taking time to succeed.

The only positive words that were mentioned were that it was creative and fun.

#### Question 7 – Would you like to work in construction?

This question was used to assess how many of the young people have or are considering a career in construction. It was a 'hands up' exercise with discussions afterwards as to why/why not which fed into the next question.

86% of pupils said no, they would not want to work in construction. 8% didn't know with only 6% saying they would.

Reasons given for not wanting to work in construction matched the negative image already discussed – it is boring, dangerous and dirty. It was also perceived as a job prospect that did not suit many of the children (in their opinion) as they would not be good at it.

Those who said yes, they would like to work in construction, gave the main reasons that they would be paid a lot (contrasts traditional views), that they like building things and seeing things progress and come together and that it sounds like fun.

#### Question 8 - Videos

Following this, the students were shown three different styles of films aimed at promoting careers and gaining interest. These videos were used to gain feedback as to:

- 1) Whether it made construction look attractive as a career
- 2) Whether it provided adequate information they need to consider it as a career
- 3) Whether it changed their views on construction as a career

Two of the videos were construction based while the third was from another industry, The Royal Navy, which has been a high profile campaign on national media. This gave a different style of film and used an example of how a different industry has aimed to gain engagement and interest by promoting itself as a viable career option.







#### Video 1 - Go Construct 51

Launched by the CITB the video looks to encourage viewers to take a walk through the huge variety of roles that the industry can offer in a way that it feels young people can identify. It has had 3k views over the past 10 months.

The student's feedback was that they were not aware of the amount or range of opportunities that were available within construction and this video was informative and interesting to help provide that information. They felt that it could have a small impact on whether or not they would consider a career in construction. Of most interest were the areas of BIM, Environment, Architecture, Machinery and Construction Management. Interestingly, they did not notice the money side of things.

They found the video stereotypical however with women portrayed as office based roles and no black or ethnic minorities featured. They thought the Construction Manager was a bit younger than they had imagined and found it hard to believe that would be true. They were also a little negative about the use of a selfie stick saying it looked like it was trying too hard to be 'cool'.

#### **Video 2 - Engineering Happiness**<sup>52</sup>

Created by ICE with Bechtel, this is a film featuring civil engineers behind some of London's most iconic infrastructure projects dancing. It looks to show the public, young people in particular, how happy engineers are as well as the diverse and exciting careers on offer.

The students enjoyed this video the most as it made engineering look fun and interesting and showed off projects. There were mixed views on whether it made them consider going into engineering, it did not really give any information. Just looked like fun.

#### Video 3 - Made in the Royal Navy<sup>53</sup>

This powerful commercial aimed to convey its message directly and with impact, yet not feel forced. It looked to gain interest in a career not generally one of choice for

<sup>51</sup> https://www.youtube.com/watch?v=Eiwr2H1yBmU

<sup>52</sup> https://www.youtube.com/watch?v=z4zymdaÉJIA

<sup>53</sup> https://www.youtube.com/watch?v=mAMFQwebh6Q







many young people by focusing more on the experience and benefits it brings through the eyes of a 'real' person, and less on the individual job roles themselves.

The majority of students recognised this from the TV and liked the advert finding in exciting as well as interesting. They were not however attracted into joining the Navy, largely because they see it as a dangerous job. They all felt they could at some level identify with the main character and found it interesting to see his journey.

This was the preferred advert as it was exciting and didn't go onto long – it gained interest, gave a bit of information and many of them said they would visit the website after to find out more information.

#### 5.3 Conclusion

Construction, inclusive of manual, professional and technical roles, is not a career of choice for the young people in the study. Engineering is perhaps the only exception, possibly due to increased activity surrounding STEM subjects, however interest in this is still low at only 3%.

Young people appear to be attracted to high profile careers which visibly receive acclaim both for more traditional career choices such as Doctors and Teachers, and newly popular roles in entertainment and sports for example (although it could be argued that sports is always a popular choice throughout generations, particularly for boys). In contrast, careers in construction are not well promoted, viewed negatively and not perceived to meet young people's requirements for work.

Enjoyment, fun and receiving recognition are all top reasons given for choosing a job role to pursue, something they see as included in the top five careers chosen. Helping others was another popular reason for career choices that would explain why Doctor and Teacher are high up in the results. Construction can have beneficial outcomes for others, whether the local community or end user and both in the short and long term – perhaps this is a key message we should be promoting given this fact.

Money is another attractive prospect and given perceptions are generally that construction is not a well-paid career both in general and in this research (as shown







later), this might be another area to promote to attract young people to enter the industry.

It appears that there is are opportunities for more to be done to illustrate the attraction of construction as a career for consideration with young people as they cross from primary to secondary school, as a large percentage of students questioned said their career choice had changed during this time. The opportunity to inform and engage children of all ages, particularly as a percentage do not know what they want to do when they leave school or have various different ideas, as shown in this research, cannot be discounted. Traditionally, more direct careers engagement is carried out with pupils at year 9 when they are choosing their options. Is construction missing a trick? Should we be looking to provide creative careers advice suitable for younger age groups when young people are exposed less to external influences?

Of the influences on a young person's career choice, parents are still the main driver as has been discussed in numerous papers over the years. This plus the growth in influence from TV, internet and social media needs to be carefully considered when trying to access young people with the right information to make an informed career choice and to ensure that the correct message is being passed on to them to mitigate against any negativity. Emerging 'new' careers such as You Tuber link to the attraction to new technologies and ways of communicating – there are some good examples within the industry of how emerging technology is being used which needs to be told and which can be used to encourage young people in.

It is interesting that careers advisors do not seem to play a big part. This could perhaps suggest that they need to be embedded in the education system for younger age groups and/or it could simply be a reflection of the impact of changes to the funding of careers advice in schools.

What is interesting, is that the older pupils interviewed said that they were their own influence – young people are now generally more self-sufficient and informed due to increased ease of access to information, 24 hours a day. This in itself shows changing influences and needs to be considered in any actions taken to engage them.







There are no real surprises from the focus groups as to what young people think construction involves, the careers that it provides, and the perception of what it is like to work in the industry. This confirms there is still a long way to go before the stereotypical image of construction is reduced and that although much has been done to try to change this, it has not had any sustainable effect.

Safety came up as one of the main concerns that young people have when considering a career in construction. This is surprising given how much is done in the industry to improve on safety and that much engagement work with primary ages surrounds Health & Safety (e.g. CCS Ivor Goodsite visits). Young people want to work in good conditions, earn well and be safe – something we as an industry are committed to but it seems that the message not getting out.

Perhaps the most surprising thing around the discussions we had about construction is that young people do not see the journey from construction site to the result, seeming to disassociate the two. Construction produces such iconic buildings and structures all of which have a very unique and fascinating story, and a team of people behind them who are driven by pride in what they do and how they contribute. 'I helped build that' could be the story that we need to start telling in order to make construction a career of choice.







# 6. Conclusion - What the Research tells us

The UK Construction industry is facing a skills shortage and with the instability of the effects of the Brexit vote, both in terms of EU labour supply and EU spend in the UK, the industry needs to implement short and long-term strategies to encourage homegrown demand for construction roles to fill this gap.

The long-term strategy needs to focus on young people, making the industry an attractive career option through taking action to change perceptions and provide information in the most effective way to promote the benefits and opportunities construction as a career brings.

Previous research and the research carried out for this report, shows that this is not a new problem. The construction industry is in Groundhog Day when it comes to its image and making it an attractive career choice despite various initiatives introduced to try to change things. It could be argued that although perceptions have changed slightly, it has not had the ripple effect that is required. What more can the industry do?

When investigating what young people want to do 'when they grow up', research shows some roles have consistently appealed to young people (e.g. Dr's, Teachers), whereas the popularity of others is subject to generational change. Choices that are more recent surround entertainment and sports, possibly due to the increased ease of access to information and the appeal of 'celebrity culture' through reality TV and social media. Indeed, these professions are high profile and the rewards they bring highly visible. Maybe construction should take a leaf out of this book and look at more mainstream and modern ways of promoting itself to young people.

There is, to date, no large-scale research on modern day influences such as this and the industry could benefit from some whilst also investigating why other industries are more appealing and what they do to promote themselves, in particular, industries that have faced the same issues with perception. Any research should take into account the different key stages as already discussed, what influences young people and what they want from a career alters as they age. There is also a need for more research into what young age groups want from a career. To date, this has not be done and is arguably one of the main age groups the industry could look to target







with engagement work - before they get into the pressures of options and when external influencers are higher.

Motivations for particular career choices were standard across all the research carried out - attainment, high profile, making money, helping people and fun.

Construction is all of these things but how much does the industry do to show young people this? From feedback in school focus groups, attempts are average but could be better.

Perceptions of apprenticeships is an interesting issue. These used to be seen as a good option for consideration for young people who did not want to go down a more academic route. However, rates of take up and completion are decreasing. Modern young people are motivated by earning well, a clear career path and improvement and it could be argued that four to five years on an apprenticeship is a long time to young people who are more impatient than they were in the past. Perhaps focus should be on making them a more attractive proposal to satisfy these requirements, which would help support the new government levy as well as meet targets.

Influences on choice is an important aspect, as shown in both literary and qualitative research. Parents traditionally, and still, appear to be the main factor and industry needs to look at how it portrays itself to them, the older generation, and how it provides them with the information they need to pass down to their children. Current efforts to promote the industry, does not seem to help so, a more targeted focus could need to be implemented working with schools and being involved with community led events. It would be interesting to see further study on how the industry if promoting itself to parents, whether direct or indirect and to measure its effectiveness.

The industry also needs to be up to date with new technologies and ways of gaining information for generations who are more self-sufficient in gaining information, have a number of sources available and are demanding when it comes to what information they want, when and how. This will continue to change and evolve and it is important that the industry keep up.

Barriers to entry are also an important aspect and research suggests that the industry still has a way to go to show itself as all-inclusive and accessible.







Engineering is a bright spark when looking at previous research and, with high level of focus on STEM subjects in recent years, is a good example of how government, education and industry can effectively work together. Maybe the next step is to broaden that out and adopt it to the wider construction industry, as has already been done in the housebuilding and infrastructure sectors.<sup>54</sup> Interestingly, this is the only area not supported by the qualitative research carried out in that it still was not an area of consideration amongst the young people participating. STEM activity has largely been focused on older age groups, which could explain why as work groups were carried out with younger ages.

The 'don't know' group is an area of opportunity which the industry needs to look at to support them in their decision making by offering up construction roles as an option for their consideration and to make an informed choice on the career they wish to pursue.

Perhaps one of the main findings evident from the research, is the need for employers, government, professional associations and education to work together and give high priority to the promotion of construction as an accessible and viable career option. This needs to be in tandem with the provision of more information, advice and guidance to young people and their influencers, with entry into career paths as transparent and accessible to all. The industry needs to outline the benefits, in line with what young people want and expect from a career and dispel myths.

<sup>&</sup>lt;sup>54</sup> Transport Infrastructure Skills Strategy: Building Sustainable Skills (Jan 2016) / NHBC Foundation: Improving Recruitment of Young People into Home Building: a literature review







## 7. Recommendations

From the research findings, it is obvious that there is a disconnection between young people's perception of construction and the reality of working in the industry. Rather than see it as diverse, innovative and exciting, young people focus on the stereotypical negative image that has been haunting the industry for years. As a result, construction is not a career of choice for them. The recommendations below look at ways the industry, as a collaborative entity, can challenge these perceptions and promote itself as a viable and attractive career option for young people.

#### 7.1 CITB to reinvest the levy and co-ordinate a collaborative approach

In the CITB's Annual Report 2015, of the £182.8m collected for the levy, £89.1m funded apprenticeships while only £0.7m went on research, marketing campaigns and press coverage.

With the new apprenticeship levy launching in 2017, it is a perfect opportunity for the CITB to look to reinvest their training levy to lead and co-ordinate industry engagement with young people to attract them to pursue a career within construction through a more cohesive and structured approach

There is currently a lot of work done by different stakeholders to engage with young people. However, there is much duplication, it is disjointed and there is no effective way finding as recognised by Christie Townley at this year's UK Construction Week<sup>55</sup>

"There are many disparate groups and some fantastic examples of projects aimed at improving the reputation of the industry and attracting talent but they are working in silos – we're not currently benefiting from any cumulative mass".

Even through carrying out this research, the number of different sources and the amount of information available was overwhelming, making it difficult to decipher which to utilise. This must be even more confusing for young people and their advisors and raises the question as to how effective the industry really is at sending out a consistent message when promoting construction as an industry for consideration in career choice.

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<sup>&</sup>lt;sup>55</sup> UK Construction Week panel discussions (2016)







With young people now exposed to a huge number of sources of information and the speed in which they can access this information through new technology, the industry needs to be smarter about how it promotes itself when competing for young people's attention against other industries. It needs to look hard at how it ensures information is easily accessible, understandable and that everything done by different parties is complimentary rather than in conflict.

Success in this area will only happen if the industry, government, local authorities and education work in a more joined up, collaborative way led by one overarching organisation and the CITB seems most viable option to take on this mantle.

This would require feed in from all relevant stakeholders to ensure any strategic planning incorporates a true and realistic grass roots perspective, which would ensure measures introduced work on a practical level. It would also require an indepth analysis of all activity currently undertaken and activity planned to see where there is duplication as well as gaps, which could be filled by all working together.

This partnership approach would also allow movement to try to remove obstacles that hinder effective engagement activity. For example, the CITB, backed by industry partners, could lobby government on the introduction of school incentivisation for non-academic student achievements. This could then be used to raise the perception of all roles within the industry whether trade, professional or technical and open the door to promote it as one which is available for a wide range of young people with different skills and abilities, all worthy of equal recognition and success.

# 7.2 Investment in a creative, mainstream, industry wide promotional campaign

The construction industry does not appear to have considered, a large-scale industry wide promotional campaign run through mainstream media. Given the scale of the problem, this could be a viable option for changing young people's perceptions of working in the industry.

Taking the recent 'Made in the Royal Navy' recruitment campaign as a good case study for reference, this demonstrated an industry in a similar position take a very different approach to previous recruitment drives by utilising an advertising strategy across







multiple platforms, changing the messaging and focusing on different channels of communication. Working with a creative agency, the Royal Navy produced a campaign that focused not specifically on the individual job roles available but on the accessibility of a career with the Royal Navy and the experience, it could provide. By highlighting different individual's journey into the industry, it allowed easy identification with the characters and showed it as an exciting career option. All within 30 seconds!

The CITB, in its supervisory role as suggested above, could utilise some of the levy to represent the construction industry in a similar approach with the aim of gaining interest, inciting excitement, dispelling myths and encouraging follow up.

From the research carried out in this report, which shows a lack of association between construction and the finished project, such a campaign should look to focus on showing how construction moves from inception to completion, while taking viewers on a journey through the eyes of someone who works in the industry with whom they can relate. Imagine the impact that showing the personal journey of someone who had helped build the Olympic Stadium, or the Glenfinnan viaduct leading to Hogwarts could have in changing young people's perceptions of what it is like to work in construction.

Any such campaign should also focus on the wider benefits derived from a career in construction linking with what young people want from a career. From this study, this appears to be that it is accessible to all through a wide range of opportunities, has a positive social impact, is a fun, dynamic place to be and provides a sense of pride in work.

Pride in work and attainment of success, is something many people working in construction say, is one of their main drivers in their career. This fits with the requirements above and provides the perfect message for such a campaign - "I helped build that".

Any such large-scale campaign could also be used to diminish the negative image of construction, promote diversity and break down barriers.

Success however will only be through a co-ordinated campaign complimented and promoted on company and individual project level. This includes the introduction of a







central source of wayfinding to direct people to find out where to go for more information, to ensure confusion is minimised and information accessible.

Further consistent and creative follow up messaging would also be needed. In short, this is not something, which would work in isolation.

# 7.3 Investigate the influence of social media and how it can be utilised

While there is still a place for more traditional 'keep it in the family' type recruitment practices, it is important to consider ways in which to access young people who perhaps are not as exposed to construction through new technology, popular mass media such as reality TV and most importantly, social media.

With parental influence shown to decrease as young people age and the introduction of new careers such as You Tuber and Instagrammer, the influence of social media on young people's aspirations, as well as the way they gain information, is an important consideration for the industry.

Ofcom (2014)<sup>56</sup> discuss how, because of growing up in the digital age, 12-15 year olds are developing fundamentally different communication habits than older generations, even compared to 16-24 year olds. Despite this, and the increase in use of social media by many within construction, understanding of how and by who each of the different channels are used is an important area that needs more detailed exploration to ensure effectiveness in how it is used and it is recommended as a follow up study to this research paper. This is of particular importance if it is to be part of a larger scale, campaign as already discussed above.

Given how fast technology changes, the industry needs to take into consideration with any use of new technology, that provision needs to be made for constant review by people who understand the area to ensure it is up to date and relevant for modern day youth. Alison Watson of Design, Engineer, Construct<sup>57</sup> describes children of the 21<sup>st</sup> century as 'digital natives' who have an expectation to be constantly connected – perhaps the industry needs to see this as an opportunity and engage with young people for input into this area.

42

<sup>&</sup>lt;sup>56</sup> Article – Techie teens are shaping how we communicate, Ofcom 07 August 2014

<sup>57</sup> http://designengineerconstruct.com







## 7.4 Engaging young people earlier

Most activity around careers in construction appears to be at secondary school age when children are picking their subject options for GCSE's. Taking into consideration research discussed in this paper, children of a younger age could be a better target for industry intervention - old enough to understand concepts which have been foreign to them when very young but still young enough to accept guidance with a high level of trust. Potentially, they are also at an age where they begin to differentiate academically, a great time to display careers that are specific to them as individuals.

One example of how the industry has missed a prime opportunity to engage with young people is at KidZania<sup>58</sup> at Westfield Shopping Centre. KidZania is a real life role-play experience for 4-14 year olds blending learning and reality with entertainment. Children are given the opportunity to try out more than 60 real life role-play activities each crafted to teach kids essential life skills. Unfortunately, there is not a construction-focused experience offered.

This is not a call to discount working with older young people, more a recommendation for all different stakeholders in the industry to invest in providing more long-term engagement. Such an approach is generally only seen in framework, regeneration area and infrastructure projects, many of which have a commitment to leave a legacy for the local community in which they are developing.

This is a key focus for British Land in their community strategy for the ten-year redevelopment of Broadgate. Looking at ways to engage with young people 'from age six to sixteen', this long term approach aims to invest in young people from primary to secondary education with the potential to provide workforce to either employ from school or train further and support through higher education.

This is not an easy thing to set up, especially when working on an individual site / project, which may only be 2-3 years in construction and which may have stringent planning and client requirements. However, if organisations and government authorities were to take a more long term, collaborative approach is could be an area open to rejuvenation. Of vital importance when looking at how to engage with young

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<sup>58</sup> http://london.kidzania.com/en-uk/







people of different ages is to have an informed and knowledgeable idea of how to engage with all different age groups in a way that is most appropriate and effective for them. As explored earlier in this research, younger children focus on imagination and fantasy while older children start to show signs of different influencers and making decisions that are more informed.

# 7.5 Recruit Education Advisors to integrate education into the construction industry

There is a disjoint between education and the industry. While teachers and careers advisors do not appear to know enough about the industry to advise young people effectively, it could be argued that the industry does not know enough about education to ensure that activities fit with curriculums or to keep updated in changes in education.

This could change by allowing education into the industry to work with organisations directly and in partnership. As is often done with employment brokerages, companies could integrate an education expert into their regional operations who would engage with schools, colleges and other third parties and look to incorporate practices to engage children from age 6 to 16 as discussed above.

These advisors would have an overall umbrella understanding of how the industry can best work to support education in providing the information needed to promote construction as a viable career. Alongside introducing initiatives, this role would provide support to on-site teams, co-ordinating training and communicating new developments and relevant information so that they can tailor activity accordingly and knowledgably with the relevant resources available to them.

The Education Advisor could look to produce an Education Engagement strategy working with the HR department and the project based community teams on ways to promote the industry in schools, dispel myths, produce relevant information and resources to aid with career choices, engage the supply chain, train internal teams and partner with relevant third parties. They would also act as the conduit for wider stakeholder working groups, working with other interested parties on larger scale campaigns and initiatives, and be an expert in their field able to advise internally and input into government and other campaigns and initiatives. "Careers advice and







students' employment outcomes would be greatly improved if schools and FE colleges were better engaged with employers. The Government's Industrial Strategy for Construction identified the need for schools to engage the industry before GCSE curriculum choices are made, to allow students to pursue subjects that are prerequisites for their chosen career path in the construction industry." Skills to Build Report (2014).







# 8. Other Areas for Consideration

#### 8.1 Traditional Influencers

There is no denying that there is a lot of work needed in convincing influencers that construction is a viable option for career for young people. In addition, the industry needs to provide suitable information for them to feed down to young people in order for them to make an informed decision on the career they wish to pursue. This in itself has given rise to a number of recent studies and is far too wide ranging topic to be covered in any detail here however, does need to be highlighted as an important area of consideration.

Many of the recommendations above aim to work to change perceptions of both young people and their influencers but more targeted, complementary initiatives need to be looked at in order to really have an impact, especially as many of the views of influencers could be deep seated and so not necessarily easy to challenge. Looking at these influencers separately and assessing what their desired outcomes are from the advice they give young people would be a start.

#### 8.2 Diversity

Attracting minority groups, in particular women, into the industry and making it attractive to them seems to be an on-going issue, again mainly due to out-dated perceptions. This is an area that needs more detailed consideration than this report has capacity to give, although, as with influencers, many of the recommendations above could be utilised to target this particular image problem.

There have been many studies done on this in the past, which suggests that the main priority should now be on all within the industry taking ownership of the problem and proactively working together, in particular with some of the organisations specifically equipped to target minority groups, to try to combat it.

In doing this, the industry does need to realise that there may be different requirements for minority groups expectations for a career, in particular with regards to the working environment and visible representation of 'opportunities for all' in







high level roles within their organisation. In research carried out by Network Rail<sup>59</sup>, when the social value of engineering was highlighted, girls responded more positively and gender barriers begin to reduce.

It also needs to make it attractive and exciting, showcasing success and examples with which young people can identify.

"Waterloo Bridge was built mainly by women during the Second World War. It was said to have been finished on time and on budget", Clare Johnson (2016) - this could be a great message to promote the industry to young girls looking for careers with a wider social impact.

By case studying individuals through a large-scale campaign or social media, illustrating both aspects considered above, the industry could make itself more attractive and exciting to a diverse group of young people. Casey Elsby<sup>60</sup> is a great example of someone who could be engaged to help in this area. The UK's youngest tower crane operator at 22, she started working for Laing O'Rourke after training as an apprentice. With various social media pages and 876 followers, hers is the type of journey that the industry could promote through mainstream channels and social media to promote the industry to young girls.

#### 8.3 Image of Apprenticeships

Apprenticeships are also an area where perceptions seem to be discouraging young people from entering the industry, although this is perhaps not an industry specific issue. Alison Watson in her article 'BIM Leaders of the Future: Engaging the Digital Generation', gives an example of a parent leaving a talk on architectural visualisations at a schools Option Evening as it was promoting a Level 2 rather than GCSE qualification – not an unusual reaction sadly.

When the Apprenticeship Levy launches in 2017, with higher profile and the provision of more opportunities for the industry to utilise funding, the hope is that this will change, although it will not do so without a proactive approach to promoting opportunities or clear information to pass on to young people and those who provide guidance in their career choices. This should be a collaborative approach from all involved, in particular with support from the Department of Education.

<sup>59</sup> Switch off, switch on research – getting more women into engineering (Summer 2015)

<sup>60</sup> http://www.womanthology.co.uk (2016) 'I'm not your average crane driver but I will be just as good as the rest of them' article







# 8.4 Feedback from young people

The industry also needs to consider gaining feedback from young people to monitor perceptions and to feed into activity. Led by the Education Advisors working directly with schools, Education Ambassadors could be set up as a young person's forum for primary and secondary school children. Let us learn from them.

All of the recommendations above suggest ways that the industry could convert the image of construction into one, which is a career of choice for more young people breaking the constant cycle of threat from a skills shortage that we seem to find ourselves in. The aim behind all of them is to work towards roles in the industry being in high demand and sought after, rather than ones that young people 'settle for' or just don't consider at all.







# 9. In Summary

Having investigated young people's perceptions of construction as a viable career choice against other industries and careers that they are attracted to and what influences that, it is evident that the industry has a negative image amongst young people and is not an industry that many of them would actively look to enter.

It is imperative therefore, that the industry realises that a collaborative, proactive, and modern approach is necessary. Changing perceptions will only happen by making the industry an attractive career choice through increasing the profile of opportunities available, and visibly matching young people's requirements for work with the benefits it can bring them. Providing both them and their influencers with the information that they need to make informed decisions through long-term, consistent support, from primary to secondary age, will go towards helping to achieve that, as long as it is supported by the provision of opportunities, and an environment they want to work in.

A more up to date culture, better communication and more long term, creative thought out engagement will help inspire young people to become our workforce for the future, helping to fill the 232,000 jobs needed over the next 5 years.







# 10. Areas for further research

This report has given rise to a number of different areas for further research.

- A comparative report to assess all current sources of information and initiatives taking place across the industry and investigate the viability of amalgamating them to provide a single main source of information. Alternatively, utilise this research to act as a driver for promoting the various different sources available providing effective wayfinding. Not only would this help make things clearer but surely, it would also save money.
- Work with other countries, such as Germany and Spain, to understand why their young people hold construction in such high regard as a career choice and how they encourage them to enter the industry.
- Regular large-scale surveys into perceptions of construction and career
  aspirations and drivers, to review modern day young people's views, needs,
  influences and ways of accessing information. This also keeps the industry up to
  date providing foresight to any future threat from further recurrence of the current
  problem
- Investigation into the influence of social media on young people's career aspirations and how it can be utilised to influence and provide information







# 11. Bibliography

#### **Electronic Resources**

- 1. Active Informatics. 23 April 2015. *Giving Young People confidence in jobs in the construction industry*. [online]. Available from: < <a href="http://www.activeinformatics.com/giving-young-people-confidence-in-jobs-in-the-construction-industry/">http://www.activeinformatics.com/giving-young-people-confidence-in-jobs-in-the-construction-industry/</a>> [Accessed May 2016].
- British Youth Council. 2009. Young People's views on finding out about jobs and careers [pdf] Available from:
   <a href="http://www.byc.org.uk/media/18189/BYC%20and%20NCB.%20Young%20people's%20views%20on%20finding%20out%20about%20jobs%20and%20careers..pdf">http://www.byc.org.uk/media/18189/BYC%20and%20NCB.%20Young%20people's%20views%20on%20finding%20out%20about%20jobs%20and%20careers..pdf</a> [Accessed June 2016]
- 3. Build UK. 24 February 2016. *Build UK State of Trade Survey Q4 2015* [pdf]. Available at: <a href="http://builduk.org/wp-content/uploads/2016/02/Q4-State-of-Trade.pdf">http://builduk.org/wp-content/uploads/2016/02/Q4-State-of-Trade.pdf</a> [Accessed February 2016]
- Centre for Longitudinal Studies. 29 September 2007. When I Grow Up: The Dreams of Primary Pupils That came true. [article]. Available from: <a href="http://www.theguardian.com/uk/2007/sep/29/schools.children">http://www.theguardian.com/uk/2007/sep/29/schools.children</a> [Accessed: April 2016]
- CIOB. February 2014. No More Lost Generations: Creating construction jobs for young people [pdf] Available at:
   <a href="http://www.ciob.org/sites/default/files/No%20more%20lost%20generations%20report.pd">http://www.ciob.org/sites/default/files/No%20more%20lost%20generations%20report.pd</a>
   [Accessed December 2015]
- 6. CITB. 27 June 2015. Construction 2030 and Beyond: The Future of Jobs and Skills in the UK Construction Sector. Executive Summary [pdf] Available from: < <a href="https://www.citb.co.uk/documents/research/citb%20sami%2027th%20june%202015\_summary%20report.pdf">https://www.citb.co.uk/documents/research/citb%20sami%2027th%20june%202015\_summary%20report.pdf</a> [Accessed February 2016]
- 7. David Baldry. 1997. The Image of Construction and its Influence upon Clients, Participants, and Consumers [pdf]. Available at: <a href="http://www.arcom.ac.uk/docs/proceedings/ar1997-052-061\_Baldry.pdf">http://www.arcom.ac.uk/docs/proceedings/ar1997-052-061\_Baldry.pdf</a>> [Accessed March 2015]
- David Keel, Sarah Hartley-Jones and Robert Ellis. 2004. Careers in Construction: Children have their say! [Online]. Available from < <a href="http://www.leedsbeckett.ac.uk/teaching/vsite/resources/careers\_in\_construction.pdf">http://www.leedsbeckett.ac.uk/teaching/vsite/resources/careers\_in\_construction.pdf</a>> [Accessed May 2016]
- Engineering UK Report 2015. Engineering UK 2016: Synopsis, recommendations and calls for action [pdf] Available from: <
   <p><a href="http://www.engineeringuk.com/Engineeringuk2015/Enguk Report 2015 Interactive.pdf">http://www.engineeringuk.com/Engineeringuk2015/Enguk Report 2015 Interactive.pdf</a>
   [Accessed February 2016]
- 10. Engineering UK Report 2016. Engineering UK 2016: The State of Engineering [pdf] Available from: <a href="http://www.engineeringuk.com/Research/Engineering-UK-Report-2016/">http://www.engineeringuk.com/Research/Engineering-UK-Report-2016/</a> [Accessed September 2016]







- 11. Gov.uk. 28 January 2016. *Transport infrastructure skills strategy: building sustainable skills* [pdf] Available at:
  - <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/495900/transport-infrastructure-strategy-building-sustainable-skills.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/495900/transport-infrastructure-strategy-building-sustainable-skills.pdf</a> [Accessed February 2016]
- 12. The Huffington Post UK. 14 August 2013. Revealed: What Kids Want to Be When They Grow Up (and The Secret Dreams Of A Few Huffpost Adults). [Article]. Available from: <a href="http://www.huffingtonpost.co.uk/2013/08/14/kids-grow-up-job">http://www.huffingtonpost.co.uk/2013/08/14/kids-grow-up-job</a> n 3755574.html> [Accessed: April 2016]
- 13. HM Government. July 2013. Industry Strategy: government and industry in partnerships. Construction 2025 [pdf]. Available at: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/210099/bis-13-955-construction-2025-industrial-strategy.pdf</a> [Accessed April 2016]
- 14. Infrastructure and Projects Authority. March 2016. *Government Construction Strategy 2016-20* [pdf] Available at: <a href="https://www.gov.uk/government/publications/government-construction-strategy-2016-2020">https://www.gov.uk/government/publications/government-construction-strategy-2016-2020</a> [Accessed March 2016]
- Joey Gardiner. 27 June 2014. Latham's report: Did it change us? [online]. Available from:< <a href="http://www.building.co.uk/lathams-report-did-it-change-us?/5069333.article">http://www.building.co.uk/lathams-report-did-it-change-us?/5069333.article</a>> [Accessed August 2016]
- 16. John B Mahaffie. January 2015. *Nine Skills That Will Help Make Our Children Future Ready* [Online]. Available from: <a href="http://www.wise-qatar.org/john-mahaffie-learning-future-job-skills">http://www.wise-qatar.org/john-mahaffie-learning-future-job-skills</a>> [Accessed February 2016]
- 17. John Marriott and Nicki Moore. 2014. NHMB Foundation: improving recruitment of young people into home building: a literature review [pdf]. Available from: <a href="http://derby.openrepository.com/derby/bitstream/10545/337786/1/NHBC+Literature+review++final+18122014+(2)+NPM.pdf">http://derby.openrepository.com/derby/bitstream/10545/337786/1/NHBC+Literature+review++final+18122014+(2)+NPM.pdf</a> [Accessed May 2016]
- 18. Keith Perry. 5 August 2014. *One in Five Children Just Want to Be Rich When They Grow Up.* [Article]. Available from: <a href="http://www.telegraph.co.uk/news/newstopics/howaboutthat/11014591/One-in-five-children-just-want-to-be-rich-when-they-grow-up.html">http://www.telegraph.co.uk/news/newstopics/howaboutthat/11014591/One-in-five-children-just-want-to-be-rich-when-they-grow-up.html</a> [Accessed: April 2016]
- K.N. Ginige, R.D.G. Amaratunga and Richard Haigh. 2007. Improving Construction Industry Image to Enhance Women Representation in the Industry Workforce [pdf] Available at: <a href="http://www.arcom.ac.uk/-docs/proceedings/ar2007-0377-0385\_Ginige\_Amaratunga\_and\_Haigh.pdf">http://www.arcom.ac.uk/-docs/proceedings/ar2007-0377-0385\_Ginige\_Amaratunga\_and\_Haigh.pdf</a>> [Accessed March 2016]
- 20. LCCI / KMPG. November 2014. Skills to Build: LCCI/KPMG Construction Skills Index (London and the South East) 2014 [pdf]. Available at: <a href="http://www.londonchamber.co.uk/DocImages/12960.pdf">http://www.londonchamber.co.uk/DocImages/12960.pdf</a> [Accessed December 2015]
- 21. Mark L Johnson Foundation of the Wall and Ceiling Industry. 2013. Attracting Young People into Construction Field Positions [pdf]. Available at: <a href="https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Construction-(AWCI).aspx>">https://www.coaa.org/Documents/About-COAA/Workforce-Shortage/Attracting-Young-People-to-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.org/Documents/About-Coaa.







- 22. Michael Cheary. 14 December 2015. *Revealed: What your kids really want to be when they grow up* [Online]. Available from <a href="https://www.reed.co.uk/career-advice/revealed-what-your-kids-really-want-to-be-when-they-grow-up/">https://www.reed.co.uk/career-advice/revealed-what-your-kids-really-want-to-be-when-they-grow-up/</a> [Accessed February 2016]
- 23. Michael Cheary. 2016. Revealed. What your kids really want to be when they grow up. [Online]. Available from: <a href="https://www.reed.co.uk/career-advice/revealed-what-your-kids-really-want-to-be-when-they-grow-up/">https://www.reed.co.uk/career-advice/revealed-what-your-kids-really-want-to-be-when-they-grow-up/</a> [Accessed: April 2016]
- 24. Neil Martin. 26 July 2016. *Millennials are the key to construction's skills shortage, we need to engage them* [online]. Available from: <a href="https://www.theguardian.com/lendlease-redesigning-cities-zone/2016/jul/26/millennials-are-the-key-to-constructions-skills-shortage-we-need-to-engage-them">https://www.theguardian.com/lendlease-redesigning-cities-zone/2016/jul/26/millennials-are-the-key-to-constructions-skills-shortage-we-need-to-engage-them</a> [Accessed September 2016]
- 25. One Poll. 8 January 2014. What Kids Want to Be When They Grow Up [online]. Available from: <a href="https://www.onepoll.com/what-kids-want-to-be-when-they-grow-up/">https://www.onepoll.com/what-kids-want-to-be-when-they-grow-up/</a> [Accessed: April 2016]
- 26. Online College. 17 May 2011. What Influences Your Career Choice [online]. Available from: <a href="http://www.onlinecollege.org/2011/05/17/what-influences-your-career-choice/">http://www.onlinecollege.org/2011/05/17/what-influences-your-career-choice/</a> [Accessed May 2016]
- 27. Paul W. Chan and Robert Moehler. 2007. *Developing a 'Road-Map' to Facilitate Employers' Role in Engaging with the Skills Development Agenda* [pdf]. Available at: <a href="http://www.arcom.ac.uk/-docs/proceedings/ar2007-0409-0418">http://www.arcom.ac.uk/-docs/proceedings/ar2007-0409-0418</a> Chan and Moehler.pdf> [Accessed March 2016]
- 28. Paul W Chan and Michael Connolly. 2006. *The Role of Schools Careers Advisers in Encouraging New Entrants into Construction* [pdf]. Available from: <a href="http://www.arcom.ac.uk/-docs/proceedings/ar2006-0811-0820\_Chan\_and\_Connolly.pdf">http://www.arcom.ac.uk/-docs/proceedings/ar2006-0811-0820\_Chan\_and\_Connolly.pdf</a> [Accessed March 2016]
- 29. Primary Futures 2016 [online] Available from: <a href="http://www.inspiringthefuture.org/primary-futures/">http://www.inspiringthefuture.org/primary-futures/</a> [Accessed May 2016]
- Project Scotland. 18 March 2015. Third of Construction Workers say childhood characters inspired their career choices. [Online] Available from:
   <a href="http://www.projectscot.com/2015/03/third-of-construction-workers-say-childhood-characters-inspired-their-career-choices/">http://www.projectscot.com/2015/03/third-of-construction-workers-say-childhood-characters-inspired-their-career-choices/</a> [Accessed: April 2016].
- 31. QualifaX. 2016. *The Parent's Role in Career Selection* [online]. Available at: <a href="http://www.qualifax.ie/index.php?option=com\_content&view=article&id=179&Itemid=20">http://www.qualifax.ie/index.php?option=com\_content&view=article&id=179&Itemid=20</a> 7> [Accessed April 2016]
- 32. Richard Akplotsyi and Lamine Mahdjoubi. 2011. Effects of Learning Styles on Engaging Children in School Projects [pdf]. Available at: <a href="http://www.arcom.ac.uk/-docs/proceedings/ar2011-0331-0339">http://www.arcom.ac.uk/-docs/proceedings/ar2011-0331-0339</a> Akplotsyi Mahdjoubi.pdf> [Accessed March 2016]
- Shima N. Clarke Ph.D. PE and Blake J. Boyd MCSM. 2011. Youth's Perceptions of the Construction Industry: An Analysis at the Elementary, Middle and high School Levels. [pdf]. Available from < <a href="http://ascpro0.ascweb.org/archives/cd/2011/paper/CPGT342002011.pdf">http://ascpro0.ascweb.org/archives/cd/2011/paper/CPGT342002011.pdf</a> [Accessed May 2016]







- 34. Susan Adams. Forbes. 14 December 2015. What Kids in 2015 Want to be When They Grow Up [online]. Available from <a href="http://www.forbes.com/sites/susanadams/2015/12/14/what-kids-in-2015-want-to-be-when-they-grow-up/#4626aac5d17f">http://www.forbes.com/sites/susanadams/2015/12/14/what-kids-in-2015-want-to-be-when-they-grow-up/#4626aac5d17f</a> [Accessed February 2016]
- 35. UK Construction Week 2016. 9 May 2016. *Industry Calls for Change of Mind-set* [online]. Available from: < http://www.ukconstructionweek.com/> [Accessed May 2016]
- 36. UK Essays. November 2013. The Influence of Parents On Their Childs Choice of Career Education Essay [online]. Available from: <a href="https://www.ukessays.com/essays/education/the-influence-of-parents-on-their-childs-choice-of-career-education-essay.php?cref=1">https://www.ukessays.com/essays/education/the-influence-of-parents-on-their-childs-choice-of-career-education-essay.php?cref=1</a> [Accessed April 2016].
- 37. Westminster Sustainable Business Forum. January 2015. *Building Better:*\*\*Recommendations for a more sustainable UK construction sector [pdf]. Available at:

  \*\*<a href="http://www.policyconnect.org.uk/wsbf/sites/site\_wsbf/files/report/677/fieldreportdownloa\_d/wsbf-buildingbetteressaycollection.pdf">http://www.policyconnect.org.uk/wsbf/sites/site\_wsbf/files/report/677/fieldreportdownloa\_d/wsbf-buildingbetteressaycollection.pdf</a> [Accessed April 2016]
- 38. Womanthology.co.uk. 2016. 'I'm not your average crane driver but I will be just as good as the rest of them' [article] Available at:< <a href="http://www.womanthology.co.uk/im-not-your-average-crane-driver-but-i-will-be-just-as-good-as-the-rest-of-them-casey-elsby-crane-operator">http://www.womanthology.co.uk/im-not-your-average-crane-driver-but-i-will-be-just-as-good-as-the-rest-of-them-casey-elsby-crane-operator</a>/ > [Accessed November 2016]
- 39. YouGov.uk. 29 September 2015. *Young Workers Unaware of Construction Opportunities* [online] Available from: <a href="https://yougov.co.uk/news/2015/09/29/young-workers-unaware-construction-career-opportun/">https://yougov.co.uk/news/2015/09/29/young-workers-unaware-construction-career-opportun/</a>> [Accessed May 2016]

#### **Physical Resources**

- 1. Andy Parsons. July 2016. The Citizens of the Future [article]
- 2. Construction Industry Board. 1996. Constructing a Better Image (CIB Reports). Thomas Telford.
- 3. Dr S.G. Naoum [2013] Dissertation Research & Writing for Construction Students. 2<sup>nd</sup> ed. Oxon Routledge
- 4. Chris Tighe. 2 February 2016. Boom in heritage renovations revives demands for craftsmen's skills [article]
- 5. George Harris. 2002. Construction Site Working Conditions and Welfare Facilities: A study into the effect on recruitment into the construction industry [report]
- 6. London Councils. June 2015. London Ambitions: Shaping a successful careers offer for all young Londoners [pdf]
- 7. Tui Benjamin. September 2016. When I grow up, I want to get myself a proper blog [article]







# 12. Appendix

# Appendix A: Results of Qualitative Research

Question 1: What do you want to do for a career when you are older?

RESULTS	By School			By Category		Totals	
		Burntwood	Southfields				
	Griffin School	Academy	Academy				l
Career	(Primary)	(Secondary)	(Secondary)	Primary	Secondary		%
Entertainer (e.g.							
	2	10	5	17	15	49	1.40/
dancer, singer, actor)	2	10	5	17	15	49	14%
Sportsperson (e.g.							
football, rugby,							
athlete, tennis player)	3	3	7	13	10	36	10%
Doctor	4	8	1	13	9	35	10%
Teacher	3	3	2	8	5	21	6%
Don't Know	4	3	0	7	3	17	5%
Lawyer	3	0	2	5	2	12	3%
Forensic Scientist	0	1	2	3	3	9	3%
Other	2	1	1	4	2	10	3%
Scientist	0	3	0	3	3	9	3%
Engineer	1	0	2	3	2	8	2%
Work with animals	1	2	0	3	2	8	2%
You Tuber	1	0	2	3	2	8	2%
Architect	0	1	1	2	2	6	2%
Artist	2	0	1	3	1	7	2%
n ust		U	1	3	1	/	270
Business man/woman	2	1	0	3	1	7	2%
Fashion Designer	2	1	0	3	1	7	2%
/et	2	1	0	3	1	7	2%
ournalist	1	0	1	2	1	5	1%
Writer	1	1	0	2	1	5	1%
Builder	0	0	1	1	1	3	1%
Car Designer	2	0	0	2	0	4	1%
Counsellor or	-		·	-	, i		270
Psychologist	0	1	0	1	1	3	1%
Driving Instructor	0	1	0	1	1	3	1%
Fire Officer	2	0	0	2	0	4	1%
Fitness Instructor	0	0	1	1	1	3	1%
Games Designer	2	0	0	2	0	4	1%
Geologist	0	1	0	1	1	3	1%
Graphic Designer	0	0	1	1	1	3	1%
nterior Designer	0	0	1	1	1	3	1%
nventor	0	1	0	1	1	3	1%
nvestor	0	0	1	1	1	3	1%
T	0	0	1	1	1	3	1%
udge	2	0	0	2	0	4	1%
Make-up Artist	0	1	0	1	1	3	1%
Midwife	0	0	1	1	1	3	1%
Pathologist	0	0	1	1	1	3	1%
Photographer	0	1	0	1	1	3	1%
Policeman/woman	0	0	1	1	1	3	1%
Politician	0	1	0	1	1	3	1%
Software Engineer	0	1	0	1	1	3	1%
	0	0	1	1		3	
Surgeon					1		1%
Astronaut	1	0	0	1	0	2	1%
Baker	1	0	0	1	0	2	1%
Carpenter	1	0	0	1	0	2	1%
Caterer	1	0	0	1	0	2	1%







1	0	0	1	0	2	1%
1	0	0	1	0	2	1%
1	0	0	1	0	2	1%
1	0	0	1	0	2	1%
	1 1 1	1 0 1 0 1 0 1 0	1 0 0 1 0 0 1 0 0 1 0 0	1     0     0     1       1     0     0     1       1     0     0     1       1     0     0     1	1     0     0     1     0       1     0     0     1     0       1     0     0     1     0       1     0     0     1     0	1     0     0     1     0     2       1     0     0     1     0     2       1     0     0     1     0     2       1     0     0     1     0     2       1     0     0     1     0     2

NB: Children were allowed to pick more than one option.

Question 2: Why do you want to do the job you have chosen when you are older?

RESULTS Reasons	By School			By Category		Totals	
	Griffin School (Primary)	Burntwood Academy (Secondary)	Southfields Academy (Secondary)	Primary	Secondary		%
Like the subject (related) /							
enjoy the activity	14	10	10	34	30	64	29%
Help people	10	10	4	24	14	38	17%
Looks fun / interesting	3	5	4	12	9	21	10%
Because I'm good at it	1	0	7	8	7	15	7%
Pays well / To make money	5	0	2	12	2	14	6%
Help animals	2	5	1	8	6	14	6%
Someone in my family							
does it	1	1	2	4	3	7	3%
To make my parents proud	0	0	3	3	3	6	3%
To be famous	0	2	1	3	3	6	3%
Don't Know	0	1	2	3	3	6	3%
For the experience	2	0	1	3	1	4	2%
Creative	0	0	2	2	2	4	2%
To help my family	2	0	0	2	0	2	1%
To entertain people	0	1	0	1	1	2	1%
To change the world	0	1	0	1	1	2	1%
To be rich	0	1	0	1	1	2	1%
Saw it on TV	0	1	0	1	1	2	1%
Physically suited to it	0	1	0	1	1	2	1%
Inspirational	0	0	1	1	1	2	1%
Change perceptions (women)	0	1	0	1	1	2	1%
To wear a suit to work	1	0	0	1	0	1	0%
To fix stuff	1	0	0	1	0	1	0%
Family influence	1	0	0	1	0	1	0%
	_			_			

Is this the same as when you were at primary school?

	Burntwood Academy	Southfields Academy	Totals	
No	15	15	30	55%
Yes	7	16	23	42%
Can't remember	0	2	2	4%







### What did you want to be if it was different to now?

- Footballer
- Basketball player
- Dog Sitter
- Actress
- Bus Driver
- Pilot
- Athlete
- Policewoman
- Astronaut

### Why do you think you changed your mind?

- What I enjoy doing changed
- Doesn't pay enough money
- Was inspired by a Teacher
- I decided it would be hard work
- I realised I wouldn't be able to do it
- It is impossible to do (e.g. sugar plum fairy!)
- Other people influenced me
- Found out more about different jobs and they were more appealing
- I was complimented on a different skill
- I also liked another subject and chose that instead
- Realised it's too dangerous
- Lost interest
- Was boring
- Not sure

# Question 3: Which of the following have helped you choose what you want to do when you are older?

	By Ca	ategory	T	otals
Influencer	Primary	Secondary		%
Parents	14	12	26	29%
TV	13	4	17	19%
Friends	11	1	12	13%
Internet	10	2	12	13%
Family	10	0	10	11%
Social Media	5	1	6	7%
Teacher	4	2	6	7%
Careers Advisors	0	2	2	2%







Unfinished

machinery

Usina

Wood

Years

Using hands

### Other influencers mentioned upon further discussion:

- Books
- Siblings
- People who do that job
- Brother
- Cousin
- Myself

## Question 4 – What words do you think of when you think of construction?

**Amazing** Dirty Making Architecture Don't Know Mechanics **Bia Sites** Drilling Men Working Bricklaying Dusty Metal **Bricks** Dynamite Minecraft Build Engineering Noisy Fine details Builders Not well paid **Foundations** Painting Building **Buildings** Plans Frames Cement Friendships Poles Chunky men Hard Hats Process Cool Hard work Scaffold Cranes Heavy work Scaffolding Homes Shovels Create Hotels Sites **Danger Signs Dangerous** Teamwork Lego Demolition Lifts Time Design Loud **Tools** Designing Machinery **Towers** Destroy Machines Trucks

# Question 5 – What jobs do you think there are in construction?

Accountant Environmental Making buildings ready Managers Bob the Builder Scientist Crane Drivers Making stuff App Makers **Brick Layers** First Aiders Site Managers Architect Mechanical Demolition Builders Inventor The Boss Artist **Diggers Painters** Office people Town Planner Building houses and shops **Drillers** People destroying **Building Computers** Officers things **Bulldozers** People making things **Drivers Designers** Plumber Planner **Factory Workers** Preparing buildings Carpenter Roofing **Engineers Plasterers** Contractors Liftina Scaffolders

Safety Managers







## Question 6 – What do you think it is like to work in construction?

Fun Requiring strength **Boring** 

Creative Hard Work Scary Stressful Dangerous Hot Dehydrated Sweaty Long days

Takes time to succeed Deserted Loud

Dirty **Need brains** 

PPE Dusty

# Question 7 – Would you like to work in construction?

	Griffin School (Primary)	Burntwood Academy (Secondary)	Southfields Academy (Secondary)	T	Totals	
No	24	24	14	62	86%	
Don't						
Know	0	2	4	6	8%	
Yes	0	1	3	4	6%	

## If no, why not?

**Boring** Sounds Boring

Dangerous Tiring Too Hard Dirty Too hot Doesn't suit me Do not like working in groups Too stressful

Want to be something else Messy Wouldn't be good at it Noisy Not interested You can get hurt

You do not see your family Not strong enough

# If yes, why?

- Get paid a lot
- I like building things
- · Like to see the process and things coming together
- Sounds fun