

Prof Jenny Gore
Prof Max Smith

A/Prof Kathryn Holmes
Dr Leanne Fray

Investigating the factors that influence the choice of teaching as a first career

A Report commissioned by the Queensland College of Teachers

December 2015



Table of Contents

List of Tables.....	iii
List of Figures	iv
List of Abbreviations.....	v
Executive Summary	1
Aims.....	1
Approach	1
Findings	1
Recommendations for future research and use of the literature	2
1. Background	3
1.1. Aims of the current review	3
1.2. Methods	3
1.2.1. Defining relevant studies	3
1.2.2. Identifying potential studies: Search strategy	3
1.2.3. Applying inclusion and exclusion criteria	4
1.2.4. In-depth review.....	4
2. Identifying and Describing the Studies	5
2.1. Studies included from searching and screening	5
2.2. Characteristics of the studies.....	5
2.1.1. Article source	5
2.1.2. Countries in which the studies were conducted	6
2.1.3. Study methodology	7
2.1.4. Year of publication	7
2.3 Journals included in scoping review	8
3. Literature Review	10
3.1. Teaching as a first career	10
3.1.1. The influence of others.....	10
3.1.2. Motivational factors	11
3.1.3. Other influences	11
3.1.4. Demographic characteristics of first career teachers	12
3.1.5. Summary.....	12
3.2. Influences on the choice of teaching as a career.....	12
3.2.1. The influence of others.....	14

3.2.2.	Teaching as a fallback career	15
3.2.3.	Socio-cultural influences	16
3.2.4.	Other factors influencing teaching as a career	17
3.2.5.	Motivation.....	18
3.3.	Demographic characteristics.....	25
3.3.1.	Country of residence	25
3.3.2.	Gender	26
3.3.3.	Age.....	27
3.3.4.	Teacher types	27
3.4.	Summary	29
4.	Recommendations for Future Research and Use of the Literature	30
	References.....	31
	Appendix.....	36

List of Tables

Table 1. Studies included from searching and screening	5
Table 2. Journals included in the scoping review.....	8
Table 3. Factors influencing the choice of teaching as a career	13
Table 4. Factors influencing the choice of teaching as a career: Influence of others.....	15
Table 5. Factors influencing the choice of teaching as a career: Socio-cultural influences	17
Table 6. Factors influencing the choice of teaching as a career: Other influences	18
Table 7. Factors influencing the choice of teaching as a career: Altruistic motivation	19
Table 8. Factors influencing the choice of teaching as a career: Intrinsic motivation.....	20
Table 9. Factors influencing the choice of teaching as a career: Extrinsic motivation	22
Table 10. Articles and studies included in the review	36

List of Figures

Figure 1. Article source – teaching as a career.....6

Figure 2. Countries in which the studies were conducted6

Figure 3. Methodological approach – teaching as a career7

Figure 4. Year of publication8

Figure 5. FIT-Choice Model24

List of Abbreviations

ERIC	Educational Resources Information Centre
FIT-Choice	Factors Influencing Teaching Choice
HEPP	Higher Education Participation Programme
ITE	Initial Teacher Education
OECD	Organisation for Economic Co-operation and Development
SIAS	Staff in Australia's Schools
TALIS	Teaching and Learning International Survey

Executive Summary

Aims

The aim of this scoping review was to examine contemporary empirical literature in order to identify factors that influence someone to choose teaching as a first career. The review also aimed to ascertain whether there were any differences between demographic groups. The four commonly recognised purposes of scoping reviews directly align with these aims, namely: to examine the extent, nature and range of research activity on a particular topic or question; to determine the value of undertaking a full systematic review; to summarise and disseminate research findings; and, to identify gaps in the existing research (Arksey & O'Malley, 2005).

Approach

The scoping review identified empirical studies that met the following selection criteria:

- research publications, including reports, published between 2005 and 2015 (with reference to other significant work where applicable);
- published in English;
- publications providing empirical data; and
- publications where data collection methods are specified.

A three-step approach was utilised in conducting the review:

1. Database searches were conducted using Google Scholar, ERIC, and Science Direct.

Search terms included: who chooses teaching, reasons for teaching, influences on teaching, teaching career, motivations for teaching, career choice teaching, teaching as a first career, FIT-Choice, pre-service teacher motivation.

2. A manual journal search was conducted in those journals where three or more published articles were identified in the first step. These journals were Teaching and Teacher Education, Australian Journal of Teacher Education, Journal of Education for Teaching, and Asia-Pacific Journal of Teacher Education.
3. A reference list search was completed in order to expand the scope of the papers, utilising the publications that were identified in the first two steps.

Findings

The scoping review found that there has been little research carried out between 2005 and 2015 which specifically examines factors that influence the choice of teaching as a first career. Identified literature suggests that influences on the choice of teaching as a career do not significantly differ between those who choose teaching as a first or subsequent career. As such, the review was expanded to include literature on factors that influence the choice of teaching as a career.

Identified factors influencing the choice of teaching include:

- The influence of others
- Motivational influences (including intrinsic, altruistic and extrinsic motivation)
- Teaching as a fallback career, and
- Socio-cultural influences.

Overwhelmingly, studies of teaching as a career choice during the past ten years have used quantitative methods and focused on motivational influences. This research is primarily based on the FIT-Choice Survey method which includes a specific set of pre-defined motivational influences that survey respondents rank. The model has been criticised for its lack of ability to take account of different cultural settings and its inability to allow for the inclusion of different motivational influences.

Whilst there has been some research which examines the underlying socio-cultural influences on the decision to choose teaching as a career, much of the research since 2005 has been fragmented and lacks cohesion as a whole. Demographic characteristics of participants have also been largely overlooked. Given the significant numbers of females who choose teaching as a career, a greater focus on influences on the choice of teaching for both males and females would be expected.

Recommendations for future research and use of the literature

Understanding factors that influence the choice of teaching as a career creates a knowledge base for developing teacher education policies, programs and recruitment. The choice to become a teacher and the factors that influence this choice are key considerations in designing and implementing strategies to attract and retain teachers. Given strong competition from other professions, it is equally important to investigate reasons for not becoming a teacher.

Of the few studies that did focus on teaching as a first career, only two studies gathered data from school students about their interest in teaching. This type of research is especially important for those who choose teaching, given research suggesting that the choice of teaching as a career occurs early in life, usually during the school years.

Further research is needed to more fully examine the social and cultural influences on the choice to undertake a career in teaching, taking into account differing backgrounds and contexts of potential teachers, such as ethnicity, socio-economic status, and rural and urban location.

1. Background

1.1. Aims of the current review

The aim of the current review was to conduct a scoping review of empirical and grey literature¹ in order to identify studies, published (in English) between 2005 and 2015. The review examined what contemporary literature was saying about:

- the factors that influence someone to choose teaching as a first career; and
- how influences differ according to different demographic groups, if at all.

1.2. Methods

1.2.1. Defining relevant studies

In addition to the chronological limitations that restrict the review to studies that were published between 2005 and 2015, other restrictions were included for practical purposes. The review was limited to school students, pre-service teachers and student teachers who expressed an interest in a career or had chosen a career in teaching. Studies including current teachers were excluded from the review, unless the research specifically included reflections on the influences and motivations on the initial decision to become a teacher.

Only six articles published between 2005 and 2015 met the review guidelines to focus on teaching as a first career. As a result the review was expanded to include influences on the choice of teaching as a career in general. It was also noted that many of the factors influencing the choice of teaching as a first career were consistently reported in the wider literature, whether teaching was chosen as a first or subsequent career.

1.2.2. Identifying potential studies: Search strategy

The purpose of the search strategy was to identify empirical research that centred on the influences on teaching as a first career. Searches of journals and databases were carried out using the following methods:

- A number of articles had been previously identified in a prior HEPP funded research project which examined the choice of teaching as a career. These studies were retrieved from the project database and stored in a new Endnote file.
- Electronic databases were searched and included Educational Resources Information Centre (ERIC), Science Direct and Google Scholar.
- A reference list search was conducted of all identified relevant articles.
- A manual search was carried out on all journals that contained three or more relevant articles. These journals were Teaching and Teacher Education, Australian Journal of Teacher Education, Journal of Education for Teaching, and Asia-Pacific Journal of Teacher Education.

¹ Grey literature “is usually understood to mean literature that is not formally published in sources such as books or journal articles” (Lefebvre, Manheimer, & Glanville, 2008, p. 106).

The terms used for searching databases were consistent across each of the databases and included the following terms: who chooses teaching; reasons for teaching; influences on teaching; teaching career; motivations for teaching; career choice teaching; teaching as a first career; FIT-Choice; pre-service teacher motivation.

1.2.3. Applying inclusion and exclusion criteria

The application of inclusion criteria allowed screening of studies for relevance and inclusion or exclusion from the review. Identified articles were subject to a two stage review for inclusion or exclusion. Stage one included an assessment of the year of publication, the language of publication (English), and the provision of empirical data in which data collection methods were specified. Stage two included an assessment of methodological rigour and an evaluation of whether the report or article met criteria based on the choice of teaching as a career.

All citations including titles and abstracts identified in initial searches were carried out on screen and included or excluded from the review based on stage one inclusion criteria. As only limited information was available in the abstract and title of each paper, caution was applied and if there was doubt with regard to the inclusion of the paper in the review, the full-text document was downloaded and stage one criteria were reapplied. Citation details and a copy of the full text were downloaded and added to Endnote for all articles that met the Stage one inclusion criteria. These articles were also uploaded to NVivo (QSR International, 2012) for the second stage of screening which included an in-depth review.

1.2.4. In-depth review

Articles uploaded to NVivo (QSR International, 2012) were read and coded thematically to identify major themes that were consistent with the influences on teaching as a first career or influences on teaching as a career. Stage two criteria were applied and only those studies that related specifically to factors that influence the choice of teaching as a career were included. Themes identified in this stage of analysis included the influences of others, motivation (altruistic, intrinsic, and extrinsic), the FIT-Choice model, socio-cultural influences on teaching, and other influences. These themes form the basis of the review.

Each of the studies included in the thematic analysis was placed into a table (see Table 10, Appendix) in order to provide an overview of identified articles. This table includes the type of study, journal, context (country of origin), sample size, methodology, and location (for example ERIC, Google scholar etc.). Studies which specifically address teaching as a first career are highlighted.

2. Identifying and Describing the Studies

This section reports on the results from the literature search, the application of the two stages of inclusion criteria and a preliminary description of the characteristics of the studies included in the review.

Table 10 (Appendix) includes complete details of all articles included in this review.

2.1. Studies included from searching and screening

As shown in Table 1, 141 studies were identified at the end of the first screening process. From these studies, 82 were identified at the conclusion of the second stage of screening. Seventy-five studies were ultimately included in the review. A number of studies were excluded at this stage due to sample and methodological incompatibilities. There were a number of studies, for example, that met the search terms but did not include empirical research. These included both commentaries and editorials.

Table 1. Studies included from searching and screening

Studies	Identified in review
Number of reports and articles meeting Stage 1 review	141
Number of reports and articles meeting Stage 2 review	82
Number of studies included in review	75

2.2. Characteristics of the studies

2.1.1. Article source

Detailed characteristics of the 75 studies included in the scoping review are reported in this section of the report. The majority of articles and reports were found using electronic database searches ($n = 27$), followed closely by those identified in reference list searches ($n = 25$) and articles that had been previously identified by the authors ($n = 21$). Figure 1 includes the source of studies that identified factors influencing the choice of teaching as a career.

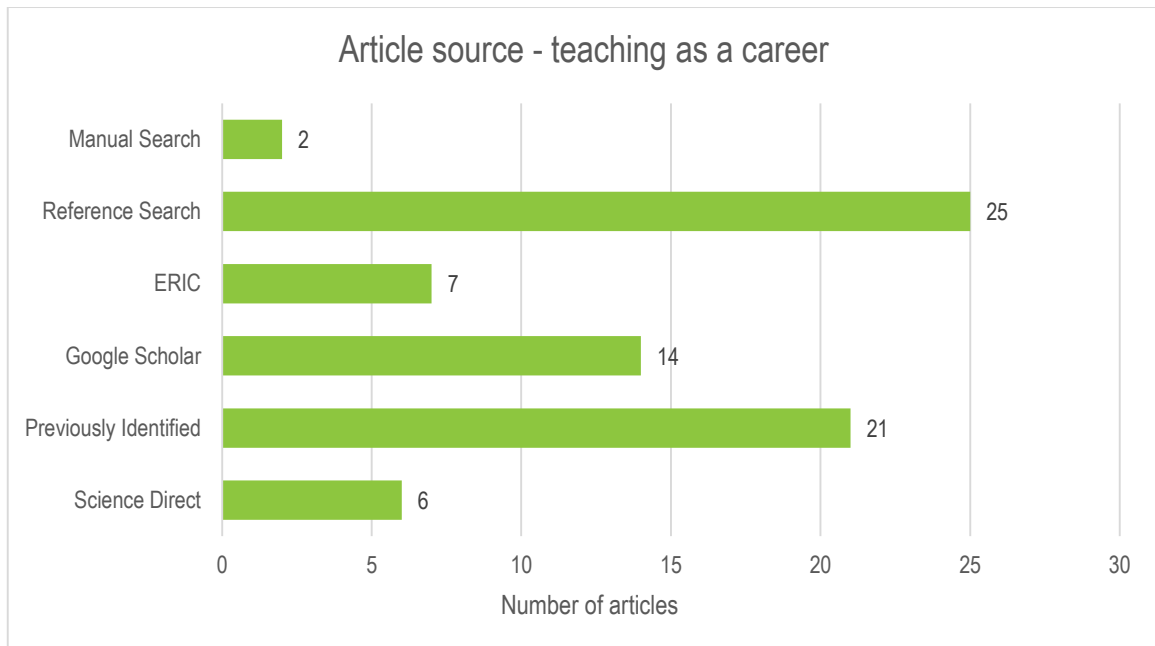


Figure 1. Article source – teaching as a career.

With regard to the factors that influence teaching as a *first* career, four studies had previously been identified by the authors. A further two studies were identified through the use of Google Scholar.

2.1.2. Countries in which the studies were conducted

Of the 75 articles that were included in the scoping review, 14 research studies were undertaken in Australia. This was closely followed by cross national research involving comparisons between two or more countries (Kohn, 1987) ($n = 9$). A further nine studies were undertaken in the USA and seven in Turkey. See Figure 2.

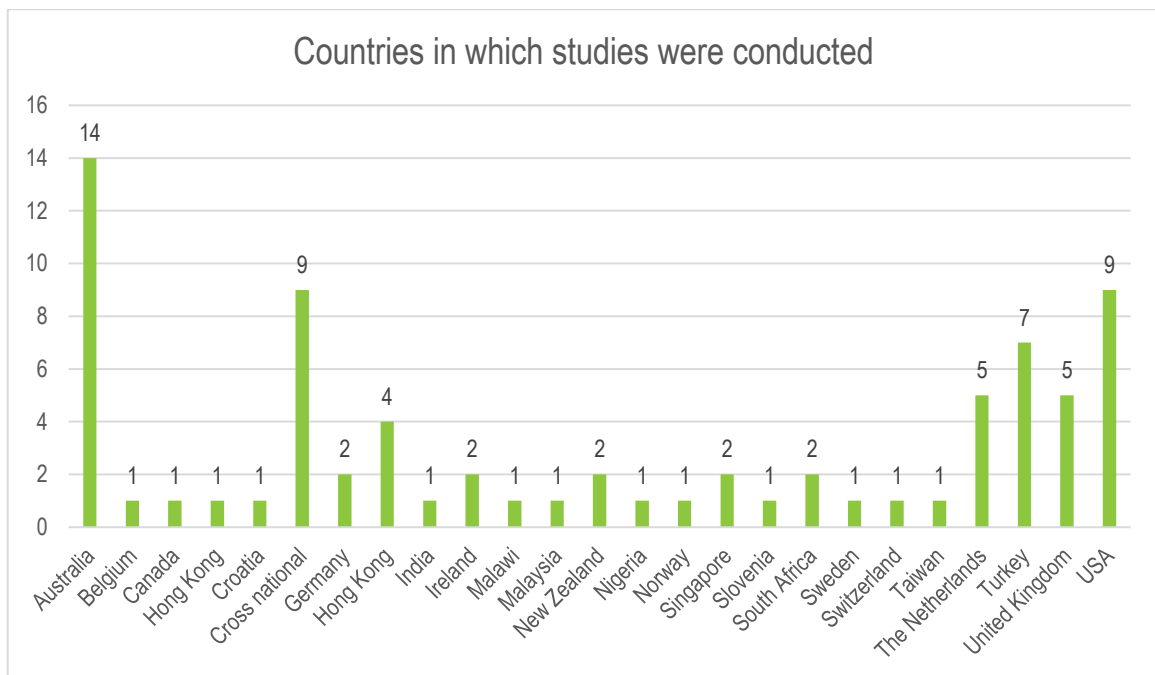


Figure 2. Countries in which the studies were conducted.

Studies which included reference to teaching as a *first* career were from Australia, Hong Kong, New Zealand, Turkey, cross national research in Portugal and Sweden, and South Africa. Each of the countries contributed one article addressing the review criteria.

2.1.3. Study methodology

Articles and reports identified in the review employed various methodologies. Quantitative methodologies were the most prevalent ($n = 40$).

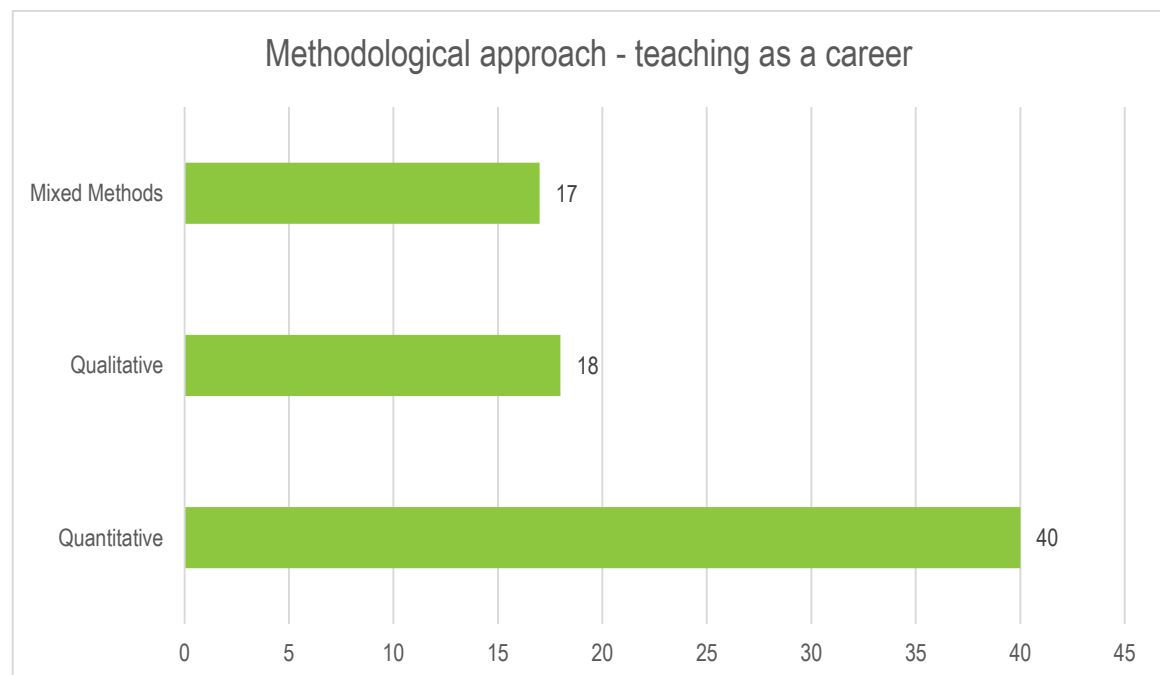


Figure 3. Methodological approach – teaching as a career.

The methodological underpinnings of those studies identified as including factors that influence the choice of teaching as a first career were mixed methodologies ($n = 3$), quantitative methodologies ($n = 2$) and qualitative methodologies ($n = 1$).

2.1.4. Year of publication

The most common year of publication for articles which examined the factors that influence teaching as a career was 2012 ($n = 20$). This was followed by publications in 2010 ($n = 8$) and 2014 ($n = 7$).

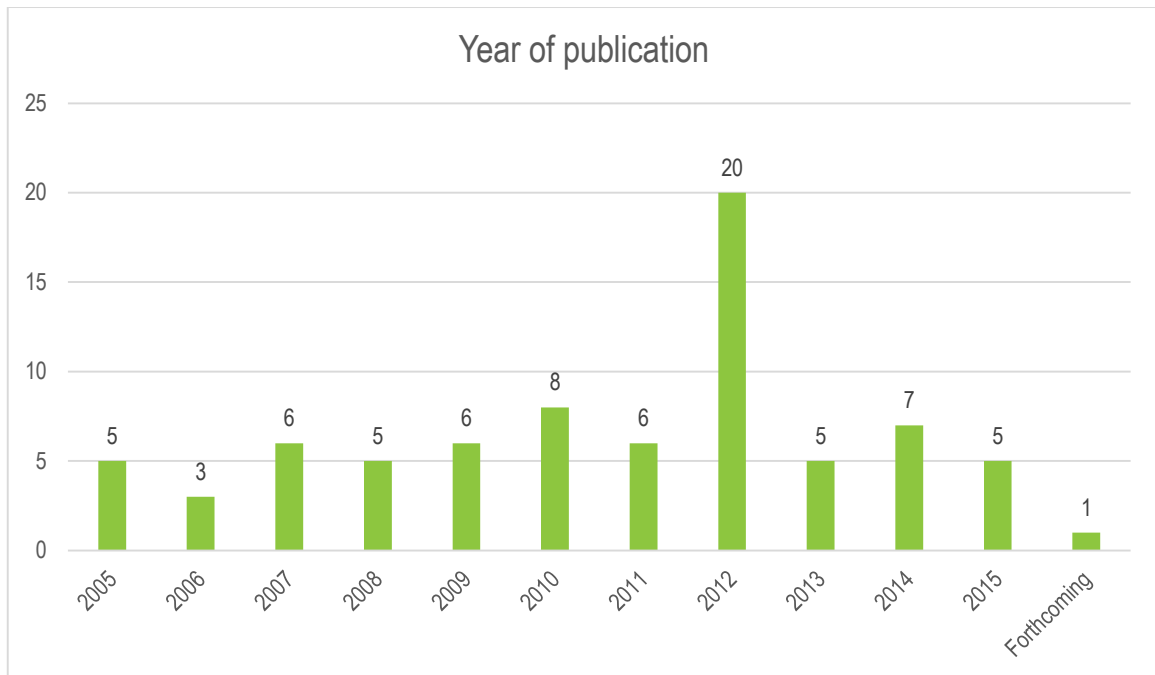


Figure 4. Year of publication.

Studies addressing teaching as a first career were published in 2006 ($n = 1$), 2007 ($n = 1$), 2013 ($n = 1$), 2014 ($n = 1$), and 2015 ($n = 1$).

2.3 Journals included in scoping review

Articles included in the scoping review were published in 45 different Journals. Teaching and Teacher Education contained the most articles ($n = 10$), followed by Asia-Pacific Journal of Teacher Education ($n = 6$) and the Journal of Education for Teaching ($n = 6$). Table 2 includes a complete list of all journals.

Table 2. Journals included in scoping review

Journal	Number of articles
Influences on Teaching as a First Career	
Asia Pacific Education Review	1
Journal of Education for Teaching	2
New Zealand Annual Review of Education	1
Research Papers in Education	1
Teacher Development	1
Influences on Teaching	
Asia-Pacific Education Researcher	1
Asia-Pacific Journal of Education	1
Asia-Pacific Journal of Teacher Education	9
Australian Journal of Educational and Developmental Psychology	1
Australian Journal of Teacher Education	3
Educational Management Administration & Leadership	1
Education	1

Journal	Number of articles
Education Research and Evaluation	1
Educational Research for Policy and Practice	1
Educational Review	1
Educational Studies	1
English in Australia	1
European Journal of Educational Studies	1
European Journal of Psychology of Education	1
European Journal of Teacher Education	2
Gender and Education	1
International Journal for Educational and Vocational Guidance	1
International Journal of Educational Development	1
International Journal of Educational Research	1
Journal of Agricultural Education	1
Journal of Education for Teaching	4
Journal of Education Policy	1
Journal of Experimental Education	1
Journal of Language Teaching and Research	1
Journal of Psychology in Africa	1
Journal of Research in Music Education	1
Learning and Instruction	1
Peabody Journal of Education	1
Policy Futures in Education	1
Procedia – Social and Behavioural Sciences	1
Research in Education	2
TEACH Journal of Christian Education	1
Teacher Development	2
Teacher Education Quarterly	2
Teachers and Teaching	2
Teaching and Teacher Education	10
The Journal of Negro Education	1
The Teachers College Record	1
Forthcoming articles	1
Reports (Grey literature)	4
Total	75

3. Literature Review

3.1. Teaching as a first career

There is a relatively sparse amount of literature which focuses on teaching as a first career. The six studies identified which make specific reference to teaching as a first career were studies from Hong Kong (Lai, Chan, Ko, & So, 2005), Australia (Manuel & Hughes, 2006), New Zealand (Lovett, 2007), Turkey (Yüce, Şahin, Koçer, & Kana, 2013), Portugal and Sweden (Flores & Niklasson, 2014), and South Africa (Cross & Ndofirepi, 2015). Although these studies differ dramatically methodologically, there are a number of key themes identified within the research with reference to influences on teaching as a first career. Key themes include the influence of others including role models, intrinsic, altruistic and extrinsic motivation.

3.1.1. The influence of others

All six studies indicated that family, friends and inspirational role models emerged as an influence on the decision to choose teaching as a first career. Lovett (2007), who undertook a mixed method study involving 57 primary and secondary pre-service school teachers in New Zealand, identified family and friends (including role models) as a key influence on New Zealand pre-service teachers. Many of these pre-service teachers had family members or close relatives who were teachers or had inspirational role models that played a significant role in influencing their choice to become a teacher. The influence of others including family, friends and role models was also found to be important in Manuel and Hughes (2006) quantitative Australian study of 79 pre-service teachers, Flores and Niklasson's (2014) quantitative study of 269 student teachers from Sweden and Portugal, and more recently Cross and Ndofirepi's (2015) narrative life history study of 45 student teachers in South Africa.

The influence of others, including the mass media, family, friends, teachers, and peers was also found to be a factor in a study of 1249 Secondary Seven (final year of high school) students in Hong Kong (Lai et al., 2005). In one of the few studies that reported on the career aspirations of secondary school students, Lai et al. (2005) found that the influence of others provided both a negative and positive influence on the choice of teaching as a career. Findings suggest that while the influence of others has a small positive effect on the choice of teaching as a first career, Lai et al. (2005) also found that the influence of others could act as a deterrent.

The way in which this influence is manifested differs between cultures. Cross and Ndofirepi (2015) describe cultural traditions in South Africa which position girls and women as homemakers exerting considerable influence on females to stay at home. This pressure to stay at home is played out in families in some parts of South Africa, where girls are encouraged not to participate in further education. Further, Cross and Ndofirepi (2015) argue that teaching (along with nursing and policing) are seen as traditional "blue collar jobs for blacks" (p.101). As such the family is seen as "critical space where the ideas about teaching as career path obtained from the experiences in schools, the community/village and the media (e.g. radio and TV) are confronted and negotiated into career choices" (p. 102).

3.1.2. Motivational factors

Intrinsic, altruistic and extrinsic motivation are cited in this literature as key influences on the decision to undertake teaching as a first career (Yüce et al., 2013). Intrinsic motivation includes personal satisfaction, interest in teaching, and love of the professions (Lovett, 2007; Manuel & Hughes, 2006; Yüce et al., 2013); altruistic motivation includes service to other individuals, the community and country (McKenzie, Santiago, Sliwka, & Hiroyuki, 2005); extrinsic motivation includes salary, job guarantees and working conditions (McKenzie et al., 2005; Yüce et al., 2013).

All six studies identified outlined intrinsic motivations for teaching as a first career. These included genuinely liking and being with children (Lai et al., 2005; Lovett, 2007), to fulfil a dream or a dream come true (Flores & Niklasson, 2014; Manuel & Hughes, 2006; Yüce et al., 2013) and to have meaningful engagement with a subject area (Lai et al., 2005; Manuel & Hughes, 2006). Altruistic motivations were indicated in all six studies. These included wanting to make a worthwhile contribution to the lives of children (Lovett, 2007; Manuel & Hughes, 2006), the desire to teach or help others (Cross & Ndofirepi, 2015; Lai et al., 2005; Yüce et al., 2013), a moral obligation to their community (Cross & Ndofirepi, 2015), and working with young people (Flores & Niklasson, 2014; Lai et al., 2005; Manuel & Hughes, 2006; Yüce et al., 2013).

Extrinsic motivations were also reported as significant factors in the choice of teaching as a first career. Although not seen to be as important as intrinsic and altruistic motivations which were far more popular responses across all studies, extrinsic motivations included remuneration rewards (Lai et al., 2005; Lovett, 2007; Manuel & Hughes, 2006), employment opportunities (Flores & Niklasson, 2014; Lai et al., 2005), and working conditions such as good holidays (Lai et al., 2005; Lovett, 2007; Manuel & Hughes, 2006).

Yüce et al (2013) also point to extrinsic motivations in their mixed method study of 283 pre-service teachers in Turkey. The authors separated extrinsic motivations into 'mercenary-extrinsic' motivations and 'influence based' extrinsic motivations. Included are working conditions, social status and job security as mercenary motivations, while family support or pressure and role models are included as influence based extrinsic motivations.

Pre-service teachers who were motivated by intrinsic or altruistic reasons were found to be more likely to choose teaching as a first career (Yüce et al., 2013), while those who cited mercenary-based and influenced-based extrinsic motives were less likely to choose teaching as a first career (Yüce et al., 2013).

3.1.3. Other influences

It is important to note that a number of the participants in Manuel and Hughes' (2006) study also indicated that they had elected to enter ITE (Initial Teacher Education) for a number of reasons that were not related to their own motivations. Although not as dominant, participants cited a failure to gain entry into their preferred course, family pressure, and uncertainty about career options as reasons for undertaking ITE. Negative influences were also identified by Cross and Ndofirepi (2015) who found that many teachers chose teaching after failing to access more lucrative careers such as IT, engineering, law or business. Furthermore, Lai et al. (2005) identified a number of factors which acted as a deterrent to choosing teaching as a career. These included negativity about working with young people, the influence of others and seeing teaching as an unattractive occupation with poor job prospects and a low salary.

3.1.4. Demographic characteristics of first career teachers

Two of the six identified studies examined demographic characteristics of those who choose teaching as a first career. Yüce et al. (2013) reported that females were more likely to choose teaching as a first career than males. Lai et al. (2005) examined the demographic characteristics of participants with reference to choice of teaching as a first career more closely. This quantitative study involving 1249 Hong Kong secondary students suggests that females were more amenable to a career in teaching than males. More females also agreed with the statement 'enjoy being with children' as a reason influencing a career in teaching. Students with lower academic scores and from schools with lower university entrance ranks were also more likely to indicate an interest in teaching, while students with religious beliefs in this study were significantly more interested in teaching than those without religious beliefs.

Socio-economic status (based on a combination of household income and parent's education level) was also found to be a significant influence on the choice to teach. Students from higher SES backgrounds were less likely to indicate an interest in teaching as a career (Lai et al., 2005). Further evidence provided also suggests that students from science and commerce secondary education streams were less likely to choose teaching as a career when compared with arts students (Lai et al., 2005).

3.1.5. Summary

As the identified research suggests, key influences on teaching as a first career include the influence of others, intrinsic, altruistic and extrinsic motivations. What is also clear in reading and identifying literature on teaching as a first career is that influences on the choice of teaching tend not to be related to whether the choice of teaching is a first or subsequent career (Richardson & Watt, 2006). For this reason, the next section of this review includes a more comprehensive review of literature pertaining to influences on teaching as a career (articles published between 2005 and 2015).

3.2. Influences on the choice of teaching as a career

There appears to be little difference in influences on choosing teaching as a first career and influences on choosing teaching at all. This section of the review includes identified empirical studies which report influences on the choice of teaching as a career in general. Most of these empirical studies were conducted with pre-service teachers who are part way through a teacher training course and have already made the choice to become a teacher. The influence of others, social and cultural influences, the influence of gender and other demographic variables, and teaching as a 'fallback' career are addressed. Tables are used throughout this section to provide an overview of the factors that influence the choice of teaching as a career. In all instances, articles that include specific reference to teaching as a first career are *italicised*. In addition to the tables included in various sections highlighting specific factors influencing the choice of teaching as a career, Table 3 provides an overview of factors influencing the choice of teaching as a career according to overarching influences.

Table 3. Factors influencing the choice of teaching as a career

Influence	Authors
Influence of others - Family, friends, teachers, positive role models, school experiences and the mass media	Akar (2012); Beltman and Wosnitza (2008); Bick Har (2012); Chang-Kredl and Kingsley (2014); Chung and Yi-Cheng (2012); <i>Cross and Ndofirepi (2015)</i> ; Curtis (2012); Cushman (2005); Ejieh (2005); <i>Flores and Niklasson (2014)</i> ; Klassen, Al-Dhafri, Hannok, and Betts (2011); <i>Lai et al. (2005)</i> ; Liu (2010); Lovett (2007); McKenzie, Weldon, Rowley, Murphy, and McMillan (2014); Santoro (2010); Topkaya and Uztosun (2012); <i>Yüce et al. (2013)</i>
Influence of others - Social dissuasion or influence of others not an important factor in choice to teach	Beltman and Wosnitza (2008); Fokkens-Bruinsma and Canrinus (2012a); Heinz (2013); <i>Lai et al. (2005)</i> ; <i>Manuel and Hughes (2006)</i> ; Richardson and Watt (2006); Watt and Richardson (2012)
Teaching as a fallback career	Akar (2012); <i>Cross and Ndofirepi (2015)</i> ; Dastidar and Sikdar (2015); Fokkens-Bruinsma and Canrinus (2012a); Gore, Holmes, Smith, Barron, and Fray (forthcoming); Kılınç, Watt, and Richardson (2012); Klassen et al. (2011); Krečič and Grmek (2005); Lawver and Torres (2011); <i>Manuel and Hughes (2006)</i> ; Menzies et al. (2015); Mtika and Gates (2011); Topkaya and Uztosun (2012); Wong, Tang, and Cheng (2014)
Socio-cultural influences	Bick Har (2012); Butt, MacKenzie, and Manning (2010); Chong and Low (2009); Curtis (2012); Cushman (2005); Jungert, Alm, and Thornberg (2014); Klassen et al. (2011); Krečič and Grmek (2005); <i>Lai et al. (2005)</i> ; Lovett (2007); Low, Lim, Ch'ng, and Goh (2011); Manuel and Brindley (2005); <i>Manuel and Hughes (2006)</i> ; Olsen (2008); Roness and Smith (2010); Sinclair (2008); Sinclair, Dowson, and McInerney (2006); Struyven, Jacobs, and Dochy (2013)
Intrinsic factors - Most often cited as the reason for the choice of teaching as a career	Bick Har (2012); Butt et al. (2010); Chong and Low (2009); Curtis (2012); Cushman (2005); <i>Flores and Niklasson (2014)</i> ; Heinz (2013); Jungert et al. (2014); Klassen et al. (2011); König and Rothland (2012); Krečič and Grmek (2005); <i>Lai et al. (2005)</i> ; Lovett (2007); Low et al. (2011); <i>Manuel and Hughes (2006)</i> ; McKenzie et al. (2005); McKenzie et al. (2014); Olsen (2008); Richardson and Watt (2006); Roness and Smith (2010); Sinclair et al. (2006 2008); Struyven et al. (2013); Thomson, Turner, and Niefeld (2012); Watt and Richardson (2007); Watt et al. (2012); Wong et al. (2014); <i>Yüce et al. (2013)</i>
Altruistic reasons	Akar (2012); Azman (2012); Bullough and Hall-Kenyon (2011); Butt et al. (2010); Chong and Low (2009); Chung and Yi-Cheng (2012); <i>Cross and Ndofirepi (2015)</i> ; Cushman (2005); De Cooman et al. (2007); <i>Flores and Niklasson (2014)</i> ; Fokkens-Bruinsma and Canrinus (2012b); Gu and Lai (2012); Heinz (2013); Jungert et al. (2014); Kılınç et al. (2012); Klassen et al. (2011); König and Rothland (2012); Krečič and Grmek (2005); <i>Lai et al. (2005)</i> ; Lovett (2007); Low et al. (2011); <i>Manuel and Hughes (2006)</i> ; McKenzie et al. (2005); McKenzie et al. (2014); Olsen (2008); Osguthorpe and Sanger (2013); Pop and Turner (2009); Richardson and Watt (2006); Smethem (2007); Struyven et al. (2013); Thomson et al. (2012); Watt and Richardson (2007, 2008); <i>Yüce et al. (2013)</i>

Influence	Authors
Extrinsic reasons - Generally ranked lower than other factors. Includes working conditions, socio-economic consequences of work, professional opportunities	Aksu, Demir, Daloglu, Yildirim, and Kiraz (2010); Bick Har (2012); Bruinsma and Jansen (2010); Butt et al. (2010); Chong and Low (2009); Chung and Yi-Cheng (2012); Flores and Niklasson (2014); Fokkens-Bruinsma and Canrinus (2012b); Gao and Trent (2009); Gu and Lai (2012); Heinz (2013); Jungert et al. (2014); Klassen et al. (2011); Krečič and Grmek (2005); Lai et al. (2005); Liu (2010); Lovett (2007); Low et al. (2011); Manuel and Hughes (2006); McKenzie et al. (2005); McKenzie et al. (2014); Mwamwenda (2010); Richardson and Watt (2006); Roness and Smith (2010); Sinclair (2008); Struyven et al. (2013); Thomson et al. (2012); Watt and Richardson (2007, 2012); Yüce et al. (2013)
Extrinsic reasons - Regarded as the most important / most influential	Kılınç et al. (2012); Mtika and Gates (2011)
Perceived teaching ability	Heinz (2013); Klassen et al. (2011); Krečič and Grmek (2005); Manuel and Hughes (2006); Richardson and Watt (2006); Watt and Richardson (2007)
Demographic characteristics - Age, gender, type of teacher, country of residence	(Aksu et al., 2010; Azman, 2012; Chung & Yi-Cheng, 2012; Curtis, 2012; Fokkens-Bruinsma & Canrinus, 2014; Gore et al., forthcoming; Green & Greive, 2007; Jarvis & Woodrow, 2005; Jungert et al., 2014; Klassen et al., 2011; Krečič & Grmek, 2005; Liu, 2010; McKenzie et al., 2014; Menzies et al., 2015; Mtika & Gates, 2011; Müller, Alliata, & Benninghoff, 2009; OECD, 2012; Olsen, 2008; Parkes & Jones, 2012; Richardson & Watt, 2005; Sinclair et al., 2006; Skelton, 2009; Smethem, 2007; Spittle, Jackson, & Casey, 2009; Spittle & Spittle, 2014; Struyven et al., 2013; Thomson et al., 2012; Watt & Richardson, 2008; Watt et al., 2012; Yüce et al., 2013)

3.2.1. The influence of others

Similar to the evidence previously presented pertaining to the influence of others on teaching as a first career, family or role models influenced many pre-service teachers in their choice (Bick Har, 2012; Curtis, 2012; Manuel & Hughes, 2006). This influence appears to be consistent with students from a range of social and cultural backgrounds. Parental encouragement was found to be an influence on pre-service teachers in Nigeria (Ejeh, 2005), Taiwan (Chung & Yi-Cheng, 2012), Sweden and Portugal (Flores & Niklasson, 2014), Turkey (Topkaya & Uztosun, 2012), and Australia and Germany (Beltman & Wosnitza, 2008) – although the extent of this influence was rated low in many cases when compared with intrinsic and altruistic motivation. In a cross-national study conducted with 303 Australian and German teacher education students which examined the social aspects of motivation to choose teacher education, Beltman and Wosnitza (2008) found that immediate family members played an important role in this choice. While the authors point to the significant role that personal and emotional support from immediate family played in the choice of teaching as career, the authors also find that this influence could be negative through a lack of support and negative comments about the decision to become a teacher. Conversely, Australian research (Richardson & Watt, 2006) found that the influence and encouragement of others was not a major factor in an individual's choice of a teaching career and similar to the influences of others on teaching as a first career, this influence could be negative with social dissuasion playing a significant role in an individual's choice (Beltman & Wosnitza, 2008; Richardson & Watt, 2006).

Other studies have shown that former teachers are a significant influence on the choice of teaching as a career. For example, in a study involving participants from the USA and China, (Liu, 2010) found that grade school teachers were a major influence on the choice of teaching for US pre-service teachers, but not for those from China. In Australian research, Manuel and Hughes (2006) found that almost three-quarters of the sample had indicated that there had been a teacher or mentor who had influenced their decision to choose teaching as a career. Similar findings were reported by; Topkaya and Uztosun (2012) who indicated that the influence of prior teachers as roles models was one of the main reasons for career choice; Chang-Kredl and Kingsley (2014) who found that either emulating or opposing past teachers influenced the choice to teach; and Cushman (2005) who reported that previous positive school experiences had an influence on the choice of teaching as a career. Table 4 provides an overview of the studies in which the influence of others was noted as a significant or important factor.

Table 4. Factors influencing the choice of teaching as a career: Influence of others

Influence of Others	
Family	Beltman and Wosnitza (2008); Bick Har (2012); Chung and Yi-Cheng (2012); Cross and Ndofirepi (2015); Curtis (2012); Ejieh (2005); Lai et al. (2005); Lovett (2007); McKenzie et al. (2014); Topkaya and Uztosun (2012)
Friends	(Cross & Ndofirepi, 2015; Flores & Niklasson, 2014; Lai et al., 2005; Lovett, 2007; Manuel & Hughes, 2006)
Inspirational role models (including family, friends, teachers)	Bick Har (2012); Chang-Kredl and Kingsley (2014); Cross and Ndofirepi (2015); (Curtis, 2012); Cushman (2005); Flores and Niklasson (2014); Lai et al. (2005); Liu (2010); Lovett (2007); Manuel and Hughes (2006); McKenzie et al. (2014); Topkaya and Uztosun (2012); Yüce et al. (2013)
Positive school experiences	Cross and Ndofirepi (2015); Cushman (2005)
Mass media	Cross and Ndofirepi (2015); Lai et al. (2005)

The strength and weakness of much of this research lies in its quantitative nature. The categorisation of influences into small groups such as 'influence of family', 'influence of friends', and 'influence of past teachers' provides ease of analysis and the numerical data provides an indication of trends and patterns. However these qualities of the data also mean that few insights are available to help explain differences. Qualitative research would help to illuminate patterns identified.

3.2.2. Teaching as a fallback career

Australian research conducted with 1653 pre-service teachers from three Australian universities found that teaching is not typically considered a 'fallback' career, chosen only because other options were not available or did not work out (Richardson & Watt, 2006; Watt & Richardson, 2007). However, there is some evidence to suggest that teaching is a fallback career for some students who are aspiring to other careers. For example, Australian research involving more than 6000 primary and secondary school students shows that teaching is considered a second option by some students who feel their first choice of career may be out of reach (Gore et al., forthcoming). Internationally, research has also indicated that teaching may be a consideration if other options don't work out (Akar, 2012; Dastidar & Sikdar, 2015; Gu & Lai, 2012; Klassen et al., 2011; Lawver & Torres, 2011; Topkaya & Uztosun, 2012). Recent research indicates that teaching as a fallback career is not necessarily negative. For example, Menzies et al. (2015) has found that both

'accidental entry' and 'getting hooked on teaching' (p. 7) are both important reasons for entering the teaching profession, while Wong et al. (2014) found that teaching as a fallback career could be positive when it was seen as a viable alternative career and linked with intrinsic and altruistic motivation.

3.2.3. Socio-cultural influences

Research within the last decade that has focused on the socio-cultural influences surrounding the choice to enter teaching as a career has been patchy. Much of the research pointing to this type of influence is international in nature and provides a point of comparison to influences on choice of teaching in western countries. For example, a Nigerian Certificate in Education may enable students' direct entry into University. As such pre-service teachers in Nigeria indicated that they had taken a teaching course to bolster their chances of gaining admission to university (Ejeh, 2005). In China and Hong Kong, negative images of teachers, including the reported low status of teachers, discouraged Chinese students from choosing teaching as a career – despite teaching being viewed more favourably in Chinese society more generally (Gao & Trent, 2009; Lai et al., 2005), while in Oman, religion and social expectations have a strong role in influencing Omani pre-service teachers (Klassen et al., 2011). Furthermore, research with African-American males in the United States has demonstrated how cultural understandings can influence students to not choose a career in teaching. These students identified three key reasons for not choosing teaching including: (1) Holding negative perceptions of teachers and teaching; (2) Viewing schools as oppressive institutions where African-American males were stigmatised, labelled, and devalued; and (3) Seeing teaching as "selling out" (p. 409) as it is believed that the curriculum represents black people inaccurately and unfairly (Graham & Erwin, 2011).

In Malaysia, cultural beliefs are said to play a dominant role "in constructing favourable conditions in teaching and facilitating a positive image of the teaching profession" (Azman, 2012, p. 125), whilst English Language (ELT) teachers in Turkey indicated social influences, religious purpose, significant others and gender roles as key socio-cultural influences on the choice of teaching as a career (Sali, 2013). Further research with 974 pre-service teachers from Turkey illustrated how participant motivations and perceptions of teaching as a career were shaped by the socio-cultural context of Turkish society (Akar, 2012) which included teaching as a suitable job for women and the identification of teaching as a low status profession.

In one of the few studies that includes a focus on ethnicity as an influence on the choice of teaching as a career, Butt et al. (2010) undertook focus group and qualitative interviews with 18 British South Asian women. Findings suggest that intrinsic motivations to teach including job satisfaction, sense of achievement, their love of the subject and enjoyment of working with children were seen as influential. Also influential on the choice of teaching for British South Asian women was the flexibility offered by a teaching career and its perceived fit with both current and future family demands, and the acceptability of teaching as a career with respect to its status in the community. In addition, the authors also noted responses from participants that suggested their presence in schools as role models for their ethnic group was important, although there was also acknowledgement that this could add additional pressure (Butt et al., 2010).

In Australia, social influences were found to be less important than other factors including intrinsic and altruistic motivation (Watt & Richardson, 2007). However, one qualitative study with Indigenous Australians has pointed to 'emotional capital' as an influence on the choice of a teaching career (Santoro, 2010). Findings suggest that the mothers of Indigenous students have an important influence on the choice of their children to embark on a teaching career. Santoro (2010) argues that emotional capital expressed by mothers in the form of encouragement, anger and coercion, both motivated and inspired students to complete their schooling and to consider teaching as a career, often overcoming immense barriers and

challenges. Teaching in this context can be understood to represent opportunities for “upward class mobility” and opportunities for social change to Indigenous people more generally (Santoro, 2010, p.419). Furthermore, Gore et al. (forthcoming) have found that Indigenous primary and high school students are 1.6 times more likely to express an interest in teaching as a career than non-indigenous students, over and above the influence of other demographic factors.

Table 5. Factors influencing the choice of teaching as a career: Socio-cultural influences

Socio-cultural Influences	
Status of teachers	Akar (2012); Gao and Trent (2009)
Religion	Klassen et al. (2011); Salı (2013)
Social expectations	Klassen et al. (2011)
Cultural understandings	Akar (2012); Azman (2012); Graham and Erwin (2011); Klassen et al. (2011)
Gender roles	Akar (2012); Salı (2013)
Emotional capital	Klassen et al. (2011); Santoro (2010)
Economic conditions	Neugebauer (2015), Wong et al. (2014)
Pathway to university	Akar (2012); Ejie (2005)

3.2.4. Other factors influencing teaching as a career

A number of studies by economists in Australia, UK, and USA have found that the availability of increased earning opportunities outside of teaching has reduced the numbers of ‘high-quality’ individuals from entering the teaching profession (Neugebauer, 2015). The key message here is that career choices, including teaching, are influenced not only by individuals and those within their sphere of influence but also by prevailing economic and social conditions, including earnings and employment prospects. Studies from West Germany (Neugebauer, 2015) and Hong Kong (Wong et al., 2014) have demonstrated that in times of high unemployment risks, the likelihood to enter teaching was low and that individuals are drawn to teaching by intrinsic motivations even when labour market conditions are difficult. Other research, which includes a study of 205 pre-service and in-service teachers in the United States, reported that nearly every respondent saw teaching as a ‘calling’ and felt hopeful with regard to their potential careers and the education of their students (Bullough & Hall-Kenyon, 2011). The authors suggest that the commitment, resilience and investment in teaching demonstrated by their sense of hope and calling to the profession ensures that teachers are able to adequately cope when working conditions deteriorate. The notion of being ‘called’ or destined to teach was also reported by Osguthorpe and Sanger (2013) in their study involving content analysis of essays written by 267 pre-service teachers. Osguthorpe and Sanger (2013) also suggest that the choice of teaching as a career is connected to a desire by teachers to engage in moral work, believing that schooling has moral ends.

Table 6. Factors influencing the choice of teaching as a career: Other influences

Other Influences	
Failure to gain entry into preferred course	<i>Cross and Ndofirepi (2015); Manuel and Hughes (2006)</i>
Family pressure	<i>Beltman and Wosnitza (2008); Lai et al. (2005); Manuel and Hughes (2006); Cross and Ndofirepi (2015); Yüce et al. (2013)</i>
Uncertainty about career options	<i>Manuel and Hughes (2006)</i>
Social dissuasion	<i>Beltman and Wosnitza (2008); Fokkens-Bruinsma and Canrinus (2012a); Beltman and Wosnitza (2008); Richardson and Watt (2006)</i>
Fallback career	<i>Akar (2012); Dastidar and Sikdar (2015); Fokkens-Bruinsma and Canrinus (2012a); Gore et al. (forthcoming); Gu and Lai (2012); Klassen et al. (2011), Krečič and Grmek (2005); Menzies et al. (2015); Topkaya and Uztosun (2012); Wong et al. (2014)</i>
Teaching an unattractive career option	<i>Lai et al. (2005); Manuel and Hughes (2006)</i>
Low Salary	<i>Lai et al. (2005)</i>
Poor job prospects	<i>Beltman and Wosnitza (2008); Lai et al. (2005)</i>
Teaching as a ‘calling’	<i>Bullough and Hall-Kenyon (2011), Osguthorpe and Sanger (2013)</i>

3.2.5. Motivation

The past decade has seen an increased interest in exploring how an individual's motivation influences their decision to choose teaching as a career. Researchers have variously offered different measures of motivations to teach and offered different categories of motivations based on the findings of their research. For example, Thomson et al (2012) identified six categories of motivations in their research with 215 prospective teachers from the United States. These categories included intrinsic value, job benefits, meaningful relationships, altruistic views, ability including personal suitability to teach, and professional opportunities provided through teaching. Research from Slovenia involving 237 student teachers identified five different groups of reasons for choosing teaching as a career (Krečič & Grmek, 2005); self-realisation, altruism, material reasons linked to extrinsic motivation and based on socio-economic consequences of work, aspirations and stereotypes, and alternative extrinsic motivations such as teaching as a fallback career. Despite the various categorisations of motivations, three key motives are common to most research in the field. Intrinsic, altruistic and to a lesser extent extrinsic motivations are frequently cited in both Australian and international literature (see for example, De Cooman et al., 2007; Manuel & Hughes, 2006; Struyven et al., 2013; Yüce et al., 2013). Others have suggested that intrinsic and altruistic motivation are often blurred by study participants and argue that despite their conceptual difference that “seeing teaching as a socially worthwhile and important job is often inseparable from the job activity of teaching itself”, (Lai et al., 2005, p. 160) and propose a categorisation of motives that includes intrinsic-altruistic motives. For the purposes of this review, motivations for a career in teaching were examined based on the most common framework for motivations – altruistic, intrinsic and extrinsic.

Altruistic motivation

Altruistic motivation is one of the key influences on the choice of teaching as a career (Pop & Turner, 2009). Altruism includes viewing teaching as a job that is socially valuable and important, the desire to help children and adolescents, and to improve society (Struyven et al., 2013).

Studies with various methodological underpinnings and different international contexts point to the role altruism has in the choice of teaching. A quantitative longitudinal study with secondary students in Hong Kong found that students were attracted to teaching by the notion of providing meaning and worthwhile service to others (Lai et al., 2005). This finding is replicated by a mixed method study based in Turkey which suggests that one of the reasons students are attracted to teaching is to be of service to others (Yüce et al., 2013). Others studies have reported various altruistic motives for aspiring to a career in teaching such as the provision of moral service (Cross & Ndofirepi, 2015; Cushman, 2005; Osguthorpe & Sanger, 2013); contributing to society (Azman, 2012; Chong & Low, 2009; Jungert et al., 2014; Smethem, 2007); the desire to help and support students (Chung & Yi-Cheng, 2012; De Cooman et al., 2007; Jungert et al., 2014; McKenzie et al., 2014; Smethem, 2007; Struyven et al., 2013); to answer a calling (Bullough & Hall-Kenyon, 2011; Chong & Low, 2009; Low et al., 2011; Osguthorpe & Sanger, 2013); and to make a difference (Gu & Lai, 2012; Olsen, 2008; Struyven et al., 2013).

Altruism is an important motivational influence on the choice of teaching as a career (De Cooman et al., 2007; Jungert et al., 2014) and while it is argued that its key importance may be related to the moral commitment of teachers to serve both students and society (Osguthorpe & Sanger, 2013), further research could investigate the relationship between the altruistic motivation of teachers and the student-teacher relationship (Jungert et al., 2014).

Altruistic motivation rarely exists in isolation and is often tied to intrinsic motives.

Table 7. Factors influencing the choice of teaching as a career: Altruistic motivation

Altruistic Motivation	
Desire to help children/adolescents/others	Chung and Yi-Cheng (2012); Cross and Ndofirepi (2015); De Cooman et al. (2007); Fokkens-Bruinsma and Canrinus (2012a); Jungert et al. (2014); Lai et al. (2005); Smethem (2007); Struyven et al. (2013); Yüce et al. (2013)
Improve/contribute to society	Azman (2012), Chong and Low (2009), Jungert et al. (2014), (Manuel & Brindley, 2005); Smethem (2007), Fokkens-Bruinsma and Canrinus (2012a), Chung and Yi-Cheng (2012); Cross and Ndofirepi (2015); De Cooman et al. (2007); Fokkens-Bruinsma and Canrinus (2012a); Jungert et al. (2014); Lai et al. (2005); McKenzie et al. (2014); Smethem (2007); Struyven et al. (2013); Yüce et al. (2013)
Meaningful and worthwhile service to others including individuals, community and country	Butt et al. (2010); McKenzie et al. (2005); Thomson et al. (2012); Yüce et al. (2013)
Moral service	Azman (2012); Cross and Ndofirepi (2015); Cushman (2005); Azman (2012); Osguthorpe and Sanger (2013)
Answer a calling	Bullough and Hall-Kenyon (2011); Chong and Low (2009); Low et al. (2011); Osguthorpe and Sanger (2013)

Altruistic Motivation	
Desire to teach	<i>Cross and Ndofirepi (2015), Lai et al. (2005), Butt et al. (2010); McKenzie et al. (2005); Yüce et al. (2013)</i>
Working with children and young people	<i>Flores and Niklasson (2014); Lai et al. (2005); Manuel and Hughes (2006); McKenzie et al. (2014); Yüce et al. (2013)</i>
Worthwhile contribution to the lives of children/young people	<i>Lovett (2007); Azman (2012); Manuel and Hughes (2006)</i>
To make a difference	<i>Gu and Lai (2012); Olsen (2008); Struyven et al. (2013)</i>

Intrinsic motivation

Passion or vocation for teaching children or adolescents, interest in the subject matter and other factors inherent to teaching are often cited as intrinsic reasons for choosing teaching as a profession (Struyven et al., 2013). In the same way that altruistic motivations were comparable in different contexts, intrinsic motivation remains similar among pre-service teachers from different countries. For example, Klassen et al. (2011) reported that intrinsic motivation was a primary influence on the choice of a career in teaching for pre-service teachers from Oman and Canada. Similarly research from Australia, has also pointed to intrinsic motivation as a key motivator in the choice of teaching (Sinclair, 2008).

Intrinsic motivations do however differ between individuals, and education researchers have indicated that intrinsic motivation can take a number of different forms. Various, empirical research has shown intrinsic motivation to include the development of skills and knowledge that may be useful for a teacher's career (Struyven et al., 2013); participation in something that is interesting (Chong & Low, 2009; Jungert et al., 2014; Struyven et al., 2013); or intellectually stimulating (Sinclair, 2008; Sinclair et al., 2006); personal development (Struyven et al., 2013); and the quest for fulfilment or purpose (Curtis, 2012; Manuel & Hughes, 2006). Other studies have reported intrinsic motivation taking the form of participants enjoying the company of children (Bick Har, 2012; Cushman, 2005); the enjoyment of, or interest in teaching (Bick Har, 2012; Low et al., 2011; Roness & Smith, 2010); having a desire to work with children (Curtis, 2012; Lai et al., 2005; Manuel & Hughes, 2006; Olsen, 2008; Roness & Smith, 2010; Sinclair et al., 2006 2008); or because they love children and young people (Chong & Low, 2009; Low et al., 2011). Being suited to the career (Chong & Low; Olsen, 2008); liking the subject they were planning to teach (Chong & Low, 2009; Curtis, 2012; Jungert et al., 2014; Lai et al., 2005; Low et al., 2011; Manuel & Brindley, 2005); experiencing success in a specific subject (Olsen, 2008); or a desire to stay engaged with a chosen subject (Manuel & Hughes, 2006) were also noted as key intrinsic motivations in the choice of a career in teaching.

Whilst intrinsic and altruistic motivation are seen as key influences, many studies also pointed to the role extrinsic motivation played in influencing the career choice of teachers.

Table 8. Factors influencing the choice of teaching as a career: Intrinsic motivation

Intrinsic Motivation	
Self realisation	<i>Krečič and Grmek (2005)</i>
Aspirations	<i>Krečič and Grmek (2005)</i>
Passion for teaching children and adolescents	<i>Struyven et al. (2013)</i>

Intrinsic Motivation	
Development of skills and knowledge useful to a teaching career	Krečič and Grmek (2005); Struyven et al. (2013)
Participation in something that is interesting or intellectually stimulating	Chong and Low (2009); Jungert et al. (2014); Sinclair et al. (2006); Sinclair (2008); Struyven et al. (2013)
Personal development	Struyven et al. (2013)
Quest for fulfillment or purpose	Curtis (2012); <i>Manuel and Hughes (2006)</i>
Enjoying the company of children	Bick Har (2012); Butt et al. (2010); Cushman (2005); Struyven et al. (2013)
Enjoyment or interest in teaching	Bick Har (2012), Low et al. (2011); Roness and Smith (2010)
Desire to work with children	<i>Lai et al. (2005)</i> ; (Manuel & Brindley, 2005); <i>Manuel and Hughes (2006)</i> ; Olsen (2008); Roness and Smith (2010); Chong and Low (2009); Sinclair et al. (2006)
Love/like children and adolescents	Chong and Low (2009); Curtis (2012); <i>Lai et al. (2005)</i> ; Low et al. (2011)
Suited to career	Chong and Low (2009); Thomson et al. (2012); Olsen (2008); Struyven et al. (2013)
Personal satisfaction	<i>Lovett (2007)</i> ; <i>Manuel and Hughes (2006)</i> ; <i>Yüce et al. (2013)</i>
Interest in teaching	<i>Lovett (2007)</i> ; <i>Manuel and Hughes (2006)</i> ; Curtis (2012); <i>Yüce et al. (2013)</i>
Love of the profession	<i>Lovett (2007)</i> ; <i>Manuel and Hughes (2006)</i> ; <i>Yüce et al. (2013)</i>
Fulfill a dream	<i>Flores and Niklasson (2014)</i> ; Manuel and Brindley (2005); <i>Manuel and Hughes (2006)</i> ; <i>Lovett (2007)</i> ; <i>Yüce et al. (2013)</i>
Meaningful engagement with subject	Butt et al. (2010); Chong and Low (2009); Curtis (2012); Jungert et al. (2014); <i>Lai et al. (2005)</i> ; (Manuel & Brindley, 2005); <i>Manuel and Hughes (2006)</i> ; Olsen (2008)
Sense of Achievement	Butt et al. (2010); <i>Flores and Niklasson (2014)</i>

Extrinsic motivation

Extrinsic motivation is most commonly related to characteristics of the job itself such as holidays, salary, status and other beneficial working conditions (Struyven et al., 2013).

The place of extrinsic motivation and its influence on a career in teaching varied between countries. In the west, extrinsic motives including secure job conditions, working hours and reliable incomes were not as important as intrinsic and altruistic motivations for teaching (Jungert et al., 2014; Struyven et al., 2013). Studies from non-western countries indicated that extrinsic motivation provided a greater influence on the choice to teach. In China, for example the majority of teacher candidates enter teaching due to extrinsic reasons including the social status of teachers, tuition waivers and obligations to serve their country (Gao & Trent, 2009; Liu, 2010; Yüce et al., 2013). Extrinsic motivation in the form of salary, extra income, working conditions and good prospects for promotion was also an important influence on those entering the teaching profession in South Africa (Mwamwenda, 2010) and Turkey (Yüce et al., 2013). Further, research from

Taiwan has indicated that teaching provides a simple but stable living, a decent salary, enhanced job opportunities, lower tuition fees, and good holidays (Chung & Yi-Cheng, 2012), while in Hong Kong, professional stability, long vacations and a relatively high salary are seen as important influences on the decision to choose teaching as a career (Bick Har, 2012; Gu & Lai, 2012).

A number of factors were reported in various studies regarding the influence of extrinsic motivation on teaching. These included good or flexible working hours (Aksu et al., 2010; Jungert et al., 2014), holidays (Aksu et al., 2010; Lai et al., 2005; McKenzie et al., 2014; Struyven et al., 2013), a reliable income (Chong & Low, 2009; Jungert et al., 2014; Low et al., 2011), job security (Aksu et al., 2010; Jungert et al., 2014; Lai et al., 2005), along with perceived life-fit (Sinclair, 2008), the provision of multiple options in the job market (Roness & Smith, 2010) or the ability to balance work and family commitments (Struyven et al., 2013). Other researchers reported that good working conditions (Lai et al., 2005; McKenzie et al., 2014; Sinclair, 2008; Yüce et al., 2013) and career prospects (Bruinsma & Jansen, 2010; Chong & Low, 2009; Lai et al., 2005) were key extrinsic influences on the choice of a career in teaching.

Table 9. Factors influencing the choice of teaching as a career: Extrinsic motivation.

Extrinsic Motivation	
Job benefits	Thomson et al. (2012)
Professional opportunities	Bruinsma and Jansen (2010); Chong and Low (2009); Chung and Yi-Cheng (2012); <i>Flores and Niklasson (2014); Lai et al. (2005); Thomson et al. (2012)</i>
Socio-economic consequences of work	Bick Har (2012); Chong and Low (2009); Chung and Yi-Cheng (2012); Gu and Lai (2012); Jungert et al. (2014); Krečič and Grmek (2005); <i>Lai et al. (2005); Lovett (2007); Low et al. (2011); Manuel and Hughes (2006); Mwamwenda (2010); Yüce et al. (2013)</i>
Tuition waivers/lower fees	Chung and Yi-Cheng (2012); Gao and Trent (2009); Liu (2010); <i>Bruinsma and Jansen (2010); Yüce et al. (2013)</i>
Obligations to serve their country	Gao and Trent (2009); Liu (2010); <i>Yüce et al. (2013)</i>
Promotion prospects	Mwamwenda (2010), Bick Har (2012); <i>Yüce et al. (2013)</i>
Perceived life fit	Manuel and Brindley (2005); Sinclair (2008)
Multiple job options	Chung and Yi-Cheng (2012); Roness and Smith (2010)
Balance work and family	Butt et al. (2010), Struyven et al. (2013)
Status	Butt et al. (2010); Fokkens-Bruinsma and Canrinus (2012a); Gao and Trent (2009); Liu (2010); <i>Gao and Trent (2009); Yüce et al. (2013)</i>
Job Security	Aksu et al. (2010); Bick Har (2012); Gu and Lai (2012); Jungert et al. (2014); <i>Lai et al. (2005); McKenzie et al. (2005); Yüce et al. (2013)</i>
Working conditions including holidays and work hours	Aksu et al. (2010); Bick Har (2012); Chung and Yi-Cheng (2012); Gu and Lai (2012); Jungert et al. (2014); <i>Lai et al. (2005); Lovett (2007); Manuel and Brindley (2005); Manuel and Hughes (2006); McKenzie et al. (2014); Mwamwenda (2010); Sinclair (2008); Struyven et al. (2013); Mwamwenda (2010); Yüce et al. (2013)</i>

While intrinsic, altruistic and extrinsic motivations have generally been reported as key motivations in the choice of teaching as a career, other research has demonstrated that motivation (intrinsic, altruistic and extrinsic) can be seen as either adaptive or maladaptive

Adaptive and maladaptive motives

A Dutch survey using a quantitative methodology with 136 pre-service teachers identified both 'adaptive' and 'maladaptive' motives for the choice of a teaching career (Fokkens-Bruinsma & Canrinus, 2012a). Maladaptive motives refer to motives that are negatively related to reasons for teaching. These may include factors such as teaching as a fallback career and negative social influences (Fokkens-Bruinsma & Canrinus, 2012a). Adaptive motives were found to be positively related to effort, involvement and commitment. They were also seen to be positive in nature and included teaching ability, shaping the future of children, enhancing social equity, social status, intrinsic career values, expertise, and making a social contribution (Fokkens-Bruinsma & Canrinus, 2012a). Similar findings with regard to adaptive and maladaptive motives were reported by (Wong et al., 2014) who found that teaching as a fallback career could be either adaptive or maladaptive depending on the relationship with intrinsic or altruistic motivations. Other research has also demonstrated how extrinsic motivation can be adaptive or maladaptive. Bruinsma and Jansen (2010) found that extrinsic motivation was adaptive if it included external praise or rewards, or where pre-service teachers were acting on behalf of others. Extrinsic motivation was said to be maladaptive if it included the desire to receive praise or rewards, or if teaching was a fallback career.

Pre-service teachers often have multiple motives for choosing teaching as a career; whilst these motives are most commonly intrinsic or altruistic, extrinsic motivation also plays a key, but less important role as an influence on teaching as a career (Struyven et al., 2013; Topkaya & Uztosun, 2012). Consistent reporting in empirical studies between 2005 and 2015 has demonstrated the highly significant impact of altruistic and intrinsic motivation on teaching as a career. This influence appears to be consistent across studies with varying methodologies and geographical contexts. Furthermore, extrinsic motivation appears to be more prevalent in developing countries than English speaking metropolitan countries (Klassen et al., 2011).

Research examining the influence of motivations in teaching as a career has been criticised for its lack of adherence to existing motivational models, the absence of a systematic approach to the application of motivation theory (Watt & Richardson, 2007), or to further variables such as demographic profiles, structural elements of teacher education or to different career paths within pre-service teacher education (König & Rothland, 2012). Others have argued that researchers should adopt more "sophisticated methodologies" (Thomson et al., 2012, p. 332) when exploring the motivations of pre-service teachers so as to overcome perceived issues in previous research including inconsistent findings as a result of the use of descriptive single-item measures.

FIT-Choice model

The FIT-Choice (Factors Influencing Teaching Choice) model was developed by Watt and Richardson (2007) in an attempt to overcome some of the acknowledged issues with motivational research in relation to the choice of teaching as a career. The model draws on the expectancy-value motivational model (Eccles (Parsons) et al., 1983) which has been prominent in motivational theory for the last three decades. The model endeavours to combine a number of key motivational aspects to explain the choice of a teaching career. The FIT-Choice model (see Figure 5) includes socialisation influences (prior teaching and learning experiences, social influences and social dissuasion), task demand (expert career, high demand), task return (social status and teacher morale, salary), self-perceptions (perceived teaching ability), intrinsic career value, personal utility value (job security, job transferability, time for family), social utility value (shape

future of children/adolescents, enhance social equity, make a social contribution, work with children and adolescents) and fallback career as value constructs within the theoretical model (Richardson, Karabenick, & Watt, 2014; Watt & Richardson, 2007).

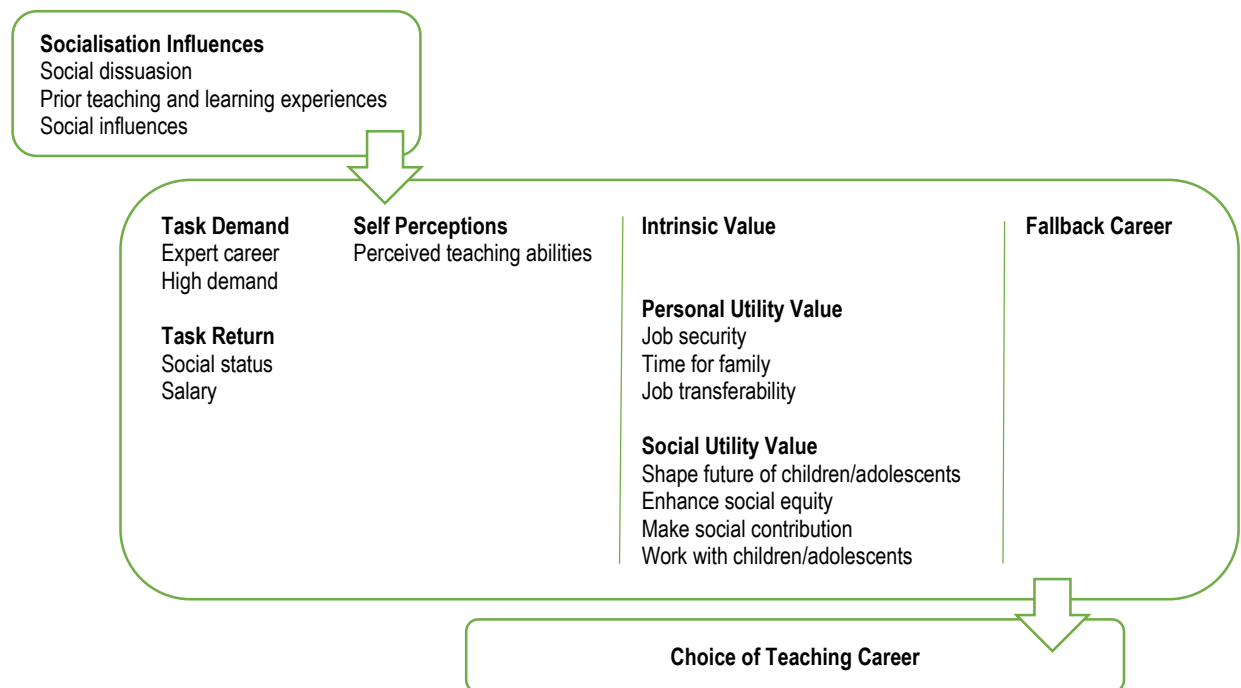


Figure 5. FIT-Choice Model (Richardson et al., 2014, p. 5)

The model (see Figure 5) has been used both within Australian and internationally over the past decade and has been empirically validated. In Australia, 1653 pre-service students from three universities were surveyed using the FIT-Choice model (Richardson & Watt, 2006). Findings indicated that the most frequently rated motivations influencing teaching as career choice were pre-service teachers' perceived teaching ability, positive prior teaching and learning experiences, personal utility values (job security, job transferability and time for family), the intrinsic value of teaching and social utility values (shaping the future of children, enhancing social equity, making a social contribution and working with children and adolescents). The lowest rated motivations reported by the authors (Richardson & Watt, 2006; Watt & Richardson, 2008, 2012; Watt et al., 2012) included teaching as a fallback career and the social influences of others encouraging teaching as a career. These results were replicated in additional Australian research in a longitudinal sample with two cohorts of pre-service teachers. In this study intrinsic value and ability beliefs were found to provide the highest influence on choosing a teaching career (Watt & Richardson, 2007).

The FIT-Choice model has also been used in other contexts. For example, research with 145 pre-service agricultural teachers in the United States found different results (Lawver & Torres, 2011). This study indicated that teacher morale, the probability of an expert career and teaching as a fallback career were primary predictors of a student's intentions to teach. Job security and the intrinsic value of teaching were also shown to be key influences of the decision to teach. Research with 1577 pre-service teachers in Turkey (Kılınç et al., 2012) using the FIT-Choice model indicated that altruistic social utility values were the most influential motivations in the choice to teach. The research also indicated that while teaching as a fallback career was least likely to be a form of motivation for pre-service teachers, this did differ across teacher types. Pre-service science teachers were more likely to report their motivation for teaching as fallback career than pre-service teachers in non-science programs.

Social utility values including making a social contribution and shaping the future of children and adolescents were found to be the highest rated motivations for research carried out in China and the United States (Lin, Shi, Wang, Zhang, & Hui, 2012). The same study using the FIT-Choice model found that the lowest rating motivations for both groups (Chinese and US students) were teaching as a fallback career and encouragement from others (socialisation influence). In an adapted version of the FIT-Choice model used in Turkey, intrinsic career value and loving the subject matter were the most frequently mentioned reasons pre-service teachers provided for the choice of teaching as a career (Sali, 2013). Personal utility value and extrinsic career value were also important reasons for career choice.

Other research has attempted to use the FIT-Choice model with personality constructs in an effort to understand how motivation for teaching as a career may be affected by personality types. In research undertaken in Croatia, Jugović, Marušić, Pavin Ivanec, and Vizek Vidović (2012) found that personality traits were better able to predict intrinsic motivation compared with extrinsic motivation and two particular interpersonal dimensions – extraversion and agreeableness – were able to predict intrinsic career value and satisfaction with teaching choice. Extraversion also predicted ability, while agreeableness was connected to social utility value motivations.

The FIT-Choice model has been used with 1287 pre-service teachers in Germany (König & Rothland, 2012), 151 Dutch pre-service teachers in The Netherlands (Fokkens-Bruinsma & Canrinus, 2012b), 423 pre-service English language teachers in Turkey (Eren & Tezel, 2010), 974 pre-service teachers in Turkey and 781 pre-service teachers in Ireland (Heinz, 2013) amongst others, offering useful comparative data on the choice of teaching as a career.

While the FIT-Choice model appears to offer one method of combining a number of key motivational constructs within an empirically tested model, the model has been criticised for not taking into consideration contrasting cultural settings and not allowing for the discovery of new factors that may influence teacher motivations (Klassen et al., 2011). Others have argued that the model misses key motivational constructs that are important components of pre-service teacher motivation. These include additional motivations such as 'loving the subject', 'transferring knowledge and skills', and 'wanting to improve the quality of teaching' (Fokkens-Bruinsma & Canrinus, 2012b, p. 264)

3.3. Demographic characteristics

While there is much research that focuses on motivation for teaching and the influences on teaching, there is little evidence to report with regard to the demographic characteristics of pre-service teachers or others aspiring to a career in teaching. Research with more than 18000 pre-service teachers in Turkey found that pre-service teachers typically came from families from urban areas with lower socio-economic status and held more traditional than secular-rational views (Aksu et al., 2010). In Australia, research currently underway at the University of Newcastle with more than 6000 students from Years 3 -12 is examining the demographic characteristics of those who aspire to a career in teaching (Gore et al., forthcoming). Published research from the last decade provides some evidence of the demographic characteristics of pre-service teachers and influences on the choice of teaching as a career. These include country of residence, gender, age and differences between various teacher types.

3.3.1. Country of residence

In a study which compared teacher motivations in Australia, the United States, Germany and Norway using the FIT-Choice model, motivations for teaching were found to vary based on country of residence (Watt et

al., 2012). Australian pre-service teachers scored higher than those from the United States, Germany and Norway for job security factors, while for pre-service teachers in the United States, time for family was seen as more important and pre-service teachers in Norway scored lower than the other countries on social utility factors. However, overall these four countries shared more similarities than differences in motivations for choosing a teaching career with the highest motivations including intrinsic value, perceived teaching ability, the desire to make a social contribution, having positive prior teaching and learning experiences and the desire to work with children and/or adolescents.

Other studies which compared motivations of pre-service students from different countries of residence included Klassen et al. (2011) who found that religion and social expectations had a significant role in Omani pre-service teachers' motivation to teach, and Liu (2010) whose research with Chinese and US pre-service teachers found the US students were more passionate about teaching and working with children whilst the Chinese were more motivated by extrinsic measures. Further research undertaken with pre-service teachers in Malawi found that many pre-service teachers undertake teacher training as a result of a failure to pursue their desired career due to a lack of funds to pay for their preferred degree or lack of success in gaining a university place (Mtika & Gates, 2011). The authors also found that in Malawi, teacher education was often used to gain access to further education and seen as a "ladder up" or "bridge across" to further career development (p.429).

Despite the variances between countries, the many similarities between teachers across the globe raise questions about whether core teaching motivations are shared by those who aspire to teaching as a career or whether certain personality types are attracted to teaching (Watt & Richardson, 2012; Watt et al., 2012).

3.3.2. Gender

An area which appears to be under researched in the past decade is that of gender. In 2012 the OECD reported education as one of the most gender segregated fields amongst the 23 countries that are involved in the OECD Teaching and Learning International Survey (TALIS) (OECD, 2012). Whilst many of the studies reviewed mentioned gender as a demographic variable, most did not report significant differences regarding gender and influences on teaching as a career.

In a qualitative study using narrative inquiry methods and a small sample ($n = 6$) with recently graduated teachers (Olsen, 2008), three gender related influences on reasons for choosing teaching as a career were identified. As girls, the teachers had grown up "playing teacher", women in their families had worked in education when they were young and the family had supported their plans to teach, and the structure and schedule of teaching was compatible with motherhood.

In cross national research comparing teacher motivations in pre-service teachers in Oman and Canada, Klassen et al. (2011) found differences in the influence of gender roles on teaching aspirations. For Omani teachers, gender played a significant role as a motive for pre-service teachers, whilst in Canada there was no support for gender roles as a motive for teaching. Research from Malaysia also found that gender plays a decisive role in influencing student's choice to become teachers. Female respondents were conscious of the interconnectedness between career goals and future family and personal goals. Females in the study also reported being more readily influenced by parents and wanting a job that was compatible with parenthood (Azman, 2012). Similar findings were reported in a study undertaken in Taiwan, which found that teaching was a suitable job for girls as it provided a high social status, stability and flexibility for child rearing (Chung & Yi-Cheng, 2012). Furthermore, in Malawi, regardless of motivation, males have a higher participation rate in teacher education programs due to structural barriers which allow for the provision of more bed spaces for male trainee teachers than female trainee teachers (Mtika & Gates, 2011). Other research from Belgium

demonstrated that female pre-service teachers place more importance on the subject matter, acquisition of skills and knowledge, personal development, and the ability to balance work and family commitments. Conversely, in this study, males placed more emphasis on holidays, spare time and having an active social life (Struyven et al., 2013). In Australia, research with 324 pre-service Physical Education (PE) teachers has indicated that females are more likely to be intrinsically motivated than males (Spittle et al., 2009), while research from Switzerland suggests that females place a greater emphasis on the relational and psychological aspects of the teaching profession (Müller et al., 2009).

Research from Turkey suggests that females choose teaching from altruistic, intrinsic and influenced-based extrinsic motivations whereas males choose a career based on extrinsic and mercenary motives. While both males and females report intrinsic reasons for choosing teaching as a career, females are more likely to report altruistic and intrinsic reasons than males (Yüce et al., 2013). In a similar finding, Jungert et al. (2014) found that stronger altruistic motives were reported by female than male pre-service teachers. The authors do however point out that the effect sizes are relatively small, meaning that the results may have small practical relevance. Furthermore, qualitative research conducted in the United Kingdom found that gender was not regarded as having any particular significance to the careers of primary school teachers, while ethnicity and sexuality were both thought to have an impact on the careers of teachers (Skelton, 2009).

3.3.3. Age

Few studies examined age as a variable with reference to influences on the choice of teaching as a profession. In a study conducted in Belgium, Struyven et al. (2013) examined pre-service teacher motivations based on participant ages. They found that 18 year olds were motivated by the desire for independence and gaining self-confidence, while 17-18 and 19-22 year olds were more interested in an active social life and good job prospects than older students. The older cohort (those 23 years and older) were interested in personal development. No significant differences were found between these cohorts of students regarding their desire to help children (Struyven et al., 2013). Research from Australia has found that age was not an influence on the motivations of pre-service teachers to teach, although older students did report weaker motivations to work with children (Sinclair et al., 2006).

3.3.4. Teacher types

A number of researchers have examined teacher types with reference to influences on teaching as a career, such as differences between primary and secondary teachers, and teaching of different subject areas. Research reveals that pre-service teachers of English are motivated by intrinsic motivations, and mathematics teachers by extrinsic motivation (Jarvis & Woodrow, 2005) or for the love of mathematics (Curtis, 2012). Technology and Applied Studies (TAS) teachers were found to be influenced by encouragement from community members, a desire to teach and the prior experience in technology during their own schooling (Green & Greive, 2007). Music teachers were found to have higher intrinsic value beliefs related to performing than teaching (Parkes & Jones, 2012). Other research has examined the influences on teaching with regard to Physical Education teachers (Spittle et al., 2009; Spittle & Spittle, 2014), finding that sport and physical activity reasons for the choice of teaching as a career were linked to extrinsic motivation, while interpersonal service reasons were linked with intrinsic motivation.

Other research has focused on the differences between primary and secondary pre-service teachers in influences on choosing teaching as a career. Research with 333 Swedish pre-service teachers revealed that primary school teachers were significantly more motivated by altruistic motivations than secondary school teachers while intrinsic factors provided a greater influence on the choice to become a teacher for secondary school students (Jungert et al., 2014). A study involving 309 pre-service teachers from Switzerland also

pointed to different motivations between primary and secondary pre-service teachers (Müller et al., 2009). The authors argue that primary pre-service teachers place more value on psychological and humanistic aspects of teaching, whereas secondary pre-service teachers are more attracted to teaching by flexibility and holidays. In Australia, the SIAS (Staff in Australia's Schools) Report (McKenzie et al., 2014) which surveyed more than 15,000 teachers in both primary and secondary schools found that primary and secondary teachers share the same basic, primarily intrinsic reasons for becoming a teacher. In a key difference between the two reports, secondary students indicated that their love of a subject area was their primary reason for their choice to become a teacher. The love of, or interest in a particular subject area was also found to be a key motivation for the choice of teaching by secondary pre-service English teachers in cross national research conducted with 52 students in Australia and England Manuel and Brindley (2005). Although there appear to be some differences in pre-service teacher motivations in their choice of teaching as a career, research undertaken with 221 Dutch pre-service teachers indicates that although there may be small differences between primary and secondary pre-service teachers in their underlying motivations in the choice of teaching as a career, there are also many similarities (Fokkens-Bruinsma & Canrinus, 2014). Findings show that working with children and adolescents are in the top three most important motives for both primary and secondary pre-service teachers, while social influence is the least important motive for choosing a career in teaching for both groups (Fokkens-Bruinsma & Canrinus, 2014). Similar findings were reported in a study undertaken in the United Kingdom which found that both primary and secondary pre-service teachers were motivated by the opportunity to make a difference in the lives of children and that they thought they would make good teachers (Menzies et al., 2015). The authors did however note that secondary pre-service teachers indicated an interest in the subject they were to teach as one of the main reasons for interest in the choice of teaching as a career (Menzies et al., 2015).

Other research has examined the role of degree major in pre-service teacher motivation for a career in teaching. In a study involving 237 pre-service teachers from Slovenia, students in the Department of Elementary Education were found to be most influenced by self realization. Altruistic reasons were more frequent amongst students enrolled in mixed two-subject programs, while material reasons were more prevalent amongst students of art education (Krečič & Grmek, 2005).

Recent research has also begun to examine teacher typologies with reference to influences on the choice of a career in teaching. Smethem (2007) identified three teacher types; career teachers (committed to a long term teaching career with ambitions for promotion); classroom teachers (content to remain in the classroom with students); and portfolio teachers (teaching as a temporary measure). The author found that career teachers saw teaching as a valuable and altruistic career, while all teaching types reported being motivated by the desire to work with children, and the moral purpose of teaching. More recent research has identified four different teacher types. These include Practitioners, Moderates, Idealists, and Rationalists (Menzies et al., 2015). Menzies et al. (2015) suggests that Practitioners are motivated by the desire to teach and work with children, Moderates are influenced by a broad range of factors, Idealists would like to make a difference to society and Rationalists are influenced by a combination of pragmatic, personal and social-justice related factors (p. 5).

Further research from the United States used cluster analysis to create motivation profiles for pre-service teachers with common reasons for choosing teaching as a career (Thomson et al., 2012). These clusters included enthusiastic, conventional and pragmatic teachers. Enthusiastic teachers indicated they were highly motivated by altruistic reasons, intrinsic reasons and abilities. Conventional teachers were similar to the enthusiastic cluster who were highly motivated by altruistic, intrinsic reasons and abilities, but had the lowest ratings for meaningful relationships and opportunities. Students in the Pragmatic cluster indicated their main reasons for teaching were related to intrinsic reasons, abilities and job benefits with low scores on

altruistic motivation. The authors then examined demographic characteristics of each of these clusters or teacher typologies and found no significant differences between clusters and demographic variables including gender, specialization, or year of study (Thomson et al., 2012). Watt and Richardson (Richardson & Watt, 2005; Watt & Richardson, 2008) have also used cluster analysis to examine demographic variables of pre-service teacher motivation. In similar findings to Thomson et al. (2012) no statistical differences were found between clusters for gender, degree major or commitment to teaching.

3.4. Summary

Although there is a vast degree of similarity among the pre-service teachers in terms of the influences on their choice of teaching as a career, these influences are complex. Multiple influences and motivations appear to be important when considering the choice to become a teacher (Fokkens-Bruinsma & Canrinus, 2014; Sinclair, 2008) and this may have implications for attracting teachers to the profession. Both contextual and individual factors have been shown to influence the choice of teaching (Heinz, 2015). Factors influencing the choice of teaching as a career include:

- The influence of others, including friends, family, teachers and other role models. This influence could be positive or act as a form of social dissuasion.
- Individual motivation, including intrinsic, altruistic and extrinsic motivation. Intrinsic and altruistic motivation were shown to be far more important, however extrinsic motivation played a significant role.
- Socio-cultural influences including social roles and cultural understandings.
- Teaching as a fallback career.
- Prevailing economic conditions and labour market opportunities

Overwhelmingly, the last ten years has seen a significant focus on quantitative research measures with a focus on motivational influences on the choice of teaching. This research is primarily based on the FIT-Choice Survey method which includes a specific set of pre-defined motivational influences that survey respondents rank. The model has been criticised for its lack of ability to take account of different cultural settings and its inability to allow for the inclusion of different motivational influences.

Whilst there has been some research which examines the underlying socio-cultural influences on the decision to choose teaching as a career, much of the research since 2005 has been fragmented and lacks cohesion as a whole. Demographic characteristics of participants have also been largely overlooked. Given the significant numbers of females who choose teaching as a career, a greater focus on influences on the choice of teaching for both males and females would be expected.

4. Recommendations for Future Research and Use of the Literature

Understanding factors that influence the choice of teaching as a career creates a knowledge base for developing teacher education policies, programs and recruitment (Flores & Niklasson, 2014; Lai et al., 2005). The majority of research included in this review does not specifically address influences on teaching as a first career. Evidence from the last ten years appears to demonstrate that this is an under researched area. Of those studies that did have some focus on the choice of teaching as a first career, two studies (Lai et al., 2005; Gore et al., forthcoming) included school students who had expressed an interest in teaching as a first career. The research by Gore et al. (forthcoming) appears to be the only Australian study in the last 10 years that specifically addresses the choice of teaching as a first career with a focus on school students. This type of research is especially important for those who choose a career in teaching, as research suggests that the choice of teaching as a career occurs early in life, usually during school years (McKenzie et al., 2014).

Empirical studies published in the last ten years have shown that there has been a focus on pre-service teacher motivations. Further research is needed to more fully examine the underlying social and cultural influences on the choice to undertake a career in teaching. For instance, what role does ethnicity play in the choice of teaching as a career?

The choice to become a teacher and the factors that influence this choice are key considerations in designing and implementing strategies that may attract and retain teachers. Given strong competition from other professions, it is equally important to investigate the reasons for not becoming a teacher.

A number of recommendations for specific targeted research have been made by various authors, including:

- Cross national research to identify the links between labour market prospects and career choice motivation (Neugebauer, 2015);
- Recognition of different teacher types who may have different motivational profiles. Further research is needed to clarify the claims made by Thomson et al. (2012) and Watt et al. (2012) and to investigate the views of prospective teachers on teaching and schooling;
- Gender is a significant factor in the choice of teaching; further research is required to understand the role of gender and its influence on individuals entering the teaching profession (Topkaya & Uztosun, 2012);
- An examination of prospective teacher motivation from different contexts, for example rural and urban students, students from high SES backgrounds and low SES backgrounds - does motivation differ? (Watt et al., 2012); and
- Time for family or family fit is frequently cited as a key reason for entry into the teaching profession, however this motivation was relatively lowly ranked in most studies. Further research should endeavour to provide a fuller explanation and understanding this trend (Watt & Richardson, 2012; Watt et al., 2012).

References

- Akar, E. O. (2012). Motivations of Turkish pre-service teachers to choose teaching as a career. *Australian Journal of Teacher Education*, 37(10), n10.
- Aksu, M., Demir, C. E., Daloglu, A., Yildirim, S., & Kiraz, E. (2010). Who are the future teachers in Turkey? Characteristics of entering student teachers. *International Journal of Educational Development*, 30(1), 91-101. doi:10.1016/j.ijedudev.2009.06.005
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19-32. doi:10.1080/1364557032000119616
- Azman, N. (2012). Choosing teaching as a career: Perspectives of male and female Malaysian student teachers in training. *European Journal of Teacher Education*, 36(1), 113-130. doi:10.1080/02619768.2012.678483
- Beltman, S., & Wosnitza, M. (2008). "You are getting too old, find a man and marry": Social aspects of motivation to choose teacher education. *Australian Journal of Educational & Developmental Psychology*, 8, 49-63.
- Bick Har, L. (2012). Why do they want to become teachers? A study on prospective teachers' motivation to teach in Hong Kong. *Asia-Pacific Education Researcher (De La Salle University Manila)*, 21(2), 307-314. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=79320524&site=eds-live>
- Bruinsma, M., & Jansen, E. P. W. A. (2010). Is the motivation to become a teacher related to pre-service teachers' intentions to remain in the profession? *European Journal of Teacher Education*, 33(2), 185-200. doi:10.1080/02619760903512927
- Bullough, R. V., & Hall-Kenyon, K. M. (2011). The call to teach and teacher hopefulness. *Teacher Development*, 15(2), 127-140. doi:10.1080/13664530.2011.571488
- Butt, G., MacKenzie, L., & Manning, R. (2010). Influences on British South Asian women's choice of teaching as a career: "You're either a career person or a family person; teaching kind of fits in the middle". *Educational Review*, 62(1), 69-83. doi:10.1080/00131910903519769
- Chang-Kredl, S., & Kingsley, S. (2014). Identity expectations in early childhood teacher education: Pre-service teachers' memories of prior experiences and reasons for entry into the profession. *Teaching and Teacher Education*, 43, 27-36. doi:10.1016/j.tate.2014.05.005
- Chong, S., & Low, E.-L. (2009). Why I want to teach and how I feel about teaching—formation of teacher identity from pre-service to the beginning teacher phase. *Educational Research for Policy and Practice*, 8(1), 59-72. doi:10.1007/s10671-008-9056-z
- Chung, I. F., & Yi-Cheng, H. (2012). Still seeking for an "Iron Bowl"? Pre-service teachers' journeys of career choice in Taiwan. *Asia-Pacific Education Researcher (De La Salle University Manila)*, 21(2), 315-324. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=79320525&site=eds-live>
- Cross, M., & Ndofirepi, E. (2015). On becoming and remaining a teacher: Rethinking strategies for developing teacher professional identity in South Africa. *Research Papers in Education*, 30(1), 95-113. doi:10.1080/02671522.2013.851729
- Curtis, C. (2012). Why do they choose to teach - and why do they leave? A study of middle school and high school mathematics teachers. *Education*, 132(4), 779-788. Retrieved from <http://search.proquest.com/docview/1022298755?accountid=10499>
- Cushman, P. (2005). It's just not a real bloke's job: Male teachers in the primary school. *Asia-Pacific Journal of Teacher Education*, 33(3), 321-338. doi:10.1080/13598660500286176

- Dastidar, A. G., & Sikdar, S. (2015). Occupation choices of high school and college students with special reference to teaching and research. *Policy Futures in Education*, 13(3), 375-394. doi:10.1177/1478210315569041
- De Cooman, R., De Gieter, S., Pepermans, R., Du Bois, C., Caers, R., & Jegers, M. (2007). Graduate teacher motivation for choosing a job in education. *International Journal for Educational and Vocational Guidance*, 7(2), 123-136. doi:10.1007/s10775-007-9117-5
- Eccles (Parsons), J., Alder, F. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives*. San Francisco, CA: W.H. Freeman.
- Ejeh, M. U. (2005). Students' reasons for entering Nigerian primary teacher education and their career plans. *Research in Education*, 74(1), 36-46.
- Eren, A., & Tezel, K. V. (2010). Factors influencing teaching choice, professional plans about teaching, and future time perspective: A mediational analysis. *Teaching and Teacher Education*, 26(7), 1416-1428. doi: 10.1016/j.tate.2010.05.001
- Flores, M. A., & Niklasson, L. (2014). Why do student teachers enrol for a teaching degree? A study of teacher recruitment in Portugal and Sweden. *Journal of Education for Teaching*, 40(4), 328-343. doi:10.1080/02607476.2014.929883
- Fokkens-Bruinsma, M., & Canrinus, E. T. (2012a). Adaptive and maladaptive motives for becoming a teacher. *Journal of Education for Teaching*, 38(1), 3-19. doi:10.1080/02607476.2012.643652
- Fokkens-Bruinsma, M., & Canrinus, E. T. (2012b). The Factors Influencing Teaching (FIT)-Choice scale in a Dutch teacher education program. *Asia-Pacific Journal of Teacher Education*, 40(3), 249-269. doi:10.1080/1359866X.2012.700043
- Fokkens-Bruinsma, M., & Canrinus, E. T. (2014). Motivation for becoming a teacher and engagement with the profession: Evidence from different contexts. *International Journal of Educational Research*, 65, 65-74. doi:10.1016/j.ijer.2013.09.012
- Gao, X., & Trent, J. (2009). Understanding mainland Chinese students' motivations for choosing teacher education programmes in Hong Kong. *Journal of Education for Teaching*, 35(2), 145-159. doi:10.1080/02607470902771037
- Gore, J., Holmes, K., Smith, M., Barron, R., & Fray, L. (forthcoming). Who wants to teach? Discourses of teacher selection and the aspirations of school students interested in becoming teachers.
- Graham, A., & Erwin, K. D. (2011). "I don't think black men teach because how they get treated as students": High-achieving African American boys' perceptions of teaching as a career option. *The Journal of Negro Education*, 80(3), 398-416. doi:10.2307/41341142
- Green, R., & Greive, C. (2007). Factors that influence the desire to become teachers of technology: An Australian study. *TEACH Journal of Christian Education*, 1(1), 10.
- Gu, M., & Lai, C. (2012). Motivation and commitment: Pre-service teachers from Hong Kong and Mainland China at a training institute in Hong Kong. *Teacher Education Quarterly*, 39(3), 45-61.
- Heinz, M. (2013). Why choose teaching in the Republic of Ireland? Student teachers' motivations and perceptions of teaching as a career and their evaluations of Irish second-level education. *European Journal of Educational Studies*, 5, 1-17.
- Heinz, M. (2015). Why choose teaching? An international review of empirical studies exploring student teachers' career motivations and levels of commitment to teaching. *Educational Research and Evaluation*, 21(3), 258-297. doi:10.1080/13803611.2015.1018278
- Jarvis, J., & Woodrow, D. (2005). Reasons for choosing a teacher training course. *Research in Education*, 73(1), 29-35.

- Jugović, I., Marušić, I., Pavin Ivanec, T., & Vizek Vidović, V. (2012). Motivation and personality of preservice teachers in Croatia. *Asia-Pacific Journal of Teacher Education*, 40(3), 271-287. doi:10.1080/1359866X.2012.700044
- Jungert, T., Alm, F., & Thornberg, R. (2014). Motives for becoming a teacher and their relations to academic engagement and dropout among student teachers. *Journal of Education for Teaching*, 40(2), 173-185. doi:10.1080/02607476.2013.869971
- Kılınc, A., Watt, H. M. G., & Richardson, P. W. (2012). Factors influencing teaching choice in Turkey. *Asia-Pacific Journal of Teacher Education*, 40(3), 199-226. doi:10.1080/1359866X.2012.700048
- Klassen, R. M., Al-Dhafri, S., Hannok, W., & Betts, S. M. (2011). Investigating pre-service teacher motivation across cultures using the Teachers' Ten Statements Test. *Teaching and Teacher Education*, 27(3), 579-588. doi:10.1016/j.tate.2010.10.012
- Kohn, M. L. (1987). Cross-national research as an analytic strategy: American Sociological Association, 1987 Presidential Address. *American Sociological Review*, 52(6), 713-731. Retrieved from <http://www.jstor.org/stable/2095831>
- König, J., & Rothland, M. (2012). Motivations for choosing teaching as a career: Effects on general pedagogical knowledge during initial teacher education. *Asia-Pacific Journal of Teacher Education*, 40(3), 289-315. doi:10.1080/1359866X.2012.700045
- Krečič, M. J., & Grmek, M. I. (2005). The reasons students choose teaching professions. *Educational Studies*, 31(3), 265-274. doi:10.1080/03055690500236449
- Lai, K. C., Chan, K. W., Ko, K. W., & So, K. S. (2005). Teaching as a career: A perspective from Hong Kong senior secondary students. *Journal of Education for Teaching*, 31(3), 153-168. doi:10.1080/02607470500168974
- Lawver, R. G., & Torres, R. M. (2011). Determinants of pre-service students' choice to teach secondary agricultural education. *Journal of Agricultural Education*, 52(1), 61-71.
- Lefebvre, C., Manheimer, E., & Glanville, J. (2008). Searching for studies. *Cochrane handbook for systematic reviews of interventions* (pp. 95-150). New York, NY: Wiley.
- Lin, E., Shi, Q., Wang, J., Zhang, S., & Hui, L. (2012). Initial motivations for teaching: Comparison between preservice teachers in the United States and China. *Asia-Pacific Journal of Teacher Education*, 40(3), 227-248. doi:10.1080/1359866X.2012.700047
- Liu, P. (2010). Examining perspectives of entry-level teacher candidates: A comparative study. *Australian Journal of Teacher Education*, 35(5), 53-78.
- Lovett, S. (2007). "Teachers of promise": Is teaching their first career choice. *New Zealand Annual Review of Education*, 16, 29-53. Retrieved from <http://hdl.handle.net/10092/1691>
- Low, E. L., Lim, S. K., Ch'ng, A., & Goh, K. C. (2011). Pre-service teachers' reasons for choosing teaching as a career in Singapore. *Asia Pacific Journal of Education*, 31(2), 195-210. doi:10.1080/02188791.2011.567441
- Manuel, J., & Brindley, S. (2005). The call to teach: Identifying pre-service teachers' motivations, expectations and key experiences during initial teacher education in Australia and the United Kingdom. *English in Australia*, 144, 38-49.
- Manuel, J., & Hughes, J. (2006). 'It has always been my dream': Exploring pre-service teachers' motivations for choosing to teach. *Teacher Development*, 10(1), 5-24. doi:10.1080/13664530600587311
- McKenzie, P., Santiago, P., Sliwka, P., & Hiroyuki, H. (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris, France: OECD.
- McKenzie, P., Weldon, P. R., Rowley, G., Murphy, M., & McMillan, J. (2014). *Staff in Australia's Schools 2013: Main report on the survey*. Retrieved from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1021&context=tll_misc

- Menzies, L., Parameshwaran, M., Trethewey, A., Shaw, B., Baars, S., & Chiong, C. (2015). *Why teach?* Retrieved from <http://whyteach.lkmco.org/wp-content/uploads/2015/10/Embargoed-until-Friday-23-October-2015-Why-Teach.pdf>
- Mtika, P., & Gates, P. (2011). What do secondary trainee teachers say about teaching as a profession of their "choice" in Malawi? *Teaching and Teacher Education*, 27(2), 424-433. doi:10.1016/j.tate.2010.09.012
- Müller, K., Alliata, R., & Benninghoff, F. (2009). Attracting and retaining teachers: A question of motivation. *Educational Management Administration & Leadership*, 37(5), 574-599. doi:10.1177/1741143209339651
- Mwamwenda, T. S. (2010). Motives for choosing a career in teaching: A South African study. *Journal of Psychology in Africa*, 20(3), 487-489. doi:10.1080/14330237.2010.10820403
- Neugebauer, M. (2015). Who chooses teaching under different labor market conditions? Evidence from West Germany, 1980–2009. *Teaching and Teacher Education*, 45, 137-148. doi:10.1016/j.tate.2014.10.004
- OECD. (2012). *What kinds of careers do boys and girls expect for themselves?* Paris, France: Author.
- Olsen, B. (2008). How reasons for entry into the profession illuminate teacher identity development. *Teacher education quarterly*, 23-40.
- Osguthorpe, R., & Sanger, M. (2013). The moral nature of teacher candidate beliefs about the purposes of schooling and their reasons for choosing teaching as a career. *Peabody Journal of Education*, 88(2), 180-197. doi:10.1080/0161956X.2013.775871
- Parkes, K. A., & Jones, B. D. (2012). Motivational constructs influencing undergraduate students' choices to become classroom music teachers or music performers. *Journal of Research in Music Education*, 60(1), 101-123. doi:10.1177/0022429411435512
- Pop, M. M., & Turner, J. E. (2009). To be or not to be ... a teacher? Exploring levels of commitment related to perceptions of teaching among students enrolled in a teacher education program. *Teachers and Teaching*, 15(6), 683-700. doi:10.1080/13540600903357017
- QSR International. (2012). *NVivo qualitative data analysis software* (Version 10, 2012).
- Richardson, P. W., Karabenick, S. A., & Watt, H. M. G. (2014). *Teacher motivation: Theory and practice*. New York, NY: Taylor & Francis.
- Richardson, P. W., & Watt, H. M. G. (2005). 'I've decided to become a teacher': Influences on career change. *Teaching and Teacher Education*, 21(5), 475-489. doi:10.1016/j.tate.2005.03.007
- Richardson, P. W., & Watt, H. M. G. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education*, 34(1), 27-56. doi:10.1080/13598660500480290
- Roness, D., & Smith, K. (2010). Stability in motivation during teacher education. *Journal of Education for Teaching*, 36(2), 169-185. doi:10.1080/02607471003651706
- Sali, P. (2013). Understanding motivations to become teachers of English: ELT trainees' perceptions. *Procedia - Social and Behavioral Sciences*, 93, 1418-1422. doi:10.1016/j.sbspro.2013.10.055
- Santoro, N. (2010). 'If it weren't for my mum...': The influence of Australian Indigenous mothers on their children's aspirations to teach. *Gender and Education*, 22(4), 419-429.
- Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to teaching. *Asia-Pacific Journal of Teacher Education*, 36(2), 79-104. doi:10.1080/13598660801971658
- Sinclair, C., Dowson, M., & McInerney, D. (2006). Motivations to teach: Psychometric perspectives across the first semester of teacher education. *The Teachers College Record*, 108(6), 1132-1154.
- Skelton, C. (2009). Failing to get men into primary teaching: A feminist critique. *Journal of Education Policy*, 24(1), 39-54. doi:10.1080/02680930802412677

- Smethem, L. (2007). Retention and intention in teaching careers: Will the new generation stay? *Teachers and Teaching*, 13(5), 465-480. doi:10.1080/13540600701561661
- Spittle, M., Jackson, K., & Casey, M. (2009). Applying self-determination theory to understand the motivation for becoming a physical education teacher. *Teaching and Teacher Education*, 25(1), 190-197. doi:10.1016/j.tate.2008.07.005
- Spittle, S., & Spittle, M. (2014). The reasons and motivation for pre-service teachers choosing to specialise in primary physical education teacher education. *Australian Journal of Teacher Education*, 39(5), n5.
- Struyven, K., Jacobs, K., & Dochy, F. (2013). Why do they want to teach? The multiple reasons of different groups of students for undertaking teacher education. *European Journal of Psychology of Education*, 28(3), 1007-1022. doi:10.1007/s10212-012-0151-4
- Thomson, M. M., Turner, J. E., & Nietfeld, J. L. (2012). A typological approach to investigate the teaching career decision: Motivations and beliefs about teaching of prospective teacher candidates. *Teaching and Teacher Education*, 28(3), 324-335. doi:10.1016/j.tate.2011.10.007
- Topkaya, E. Z., & Uztosun, M. S. (2012). Choosing teaching as a career: Motivations of pre-service English teachers in Turkey. *Journal of Language Teaching and Research*, 3(1), 126-134.
- Watt, H. M. G., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-Choice Scale. *The Journal of Experimental Education*, 75(3), 167-202. doi:10.3200/JEXE.75.3.167-202
- Watt, H. M. G., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction*, 18(5), 408-428. doi:10.1016/j.learninstruc.2008.06.002
- Watt, H. M. G., & Richardson, P. W. (2012). An introduction to teaching motivations in different countries: Comparisons using the FIT-Choice scale. *Asia-Pacific Journal of Teacher Education*, 40(3), 185-197. doi:10.1080/1359866X.2012.700049
- Watt, H. M. G., Richardson, P. W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., & Baumert, J. (2012). Motivations for choosing teaching as a career: An international comparison using the FIT-Choice scale. *Teaching and Teacher Education*, 28(6), 791-805. doi:10.1016/j.tate.2012.03.003
- Wong, A. K. Y., Tang, S. Y. F., & Cheng, M. M. H. (2014). Teaching motivations in Hong Kong: Who will choose teaching as a fallback career in a stringent job market? *Teaching and Teacher Education*, 41, 81-91. doi:10.1016/j.tate.2014.03.009
- Yüce, K., Şahin, E., Koçer, Ö., & Kana, F. (2013). Motivations for choosing teaching as a career: A perspective of pre-service teachers from a Turkish context. *Asia Pacific Education Review*, 14(3), 295-306. doi:10.1007/s12564-013-9258-9

Appendix

Table 10. Articles and studies included in the review

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Akar, E. O.	2012	Motivations of Turkish pre-service teachers to choose teaching as a career	Australian Journal of Teacher Education	Empirical	Quantitative	974	Not stated	Turkey	FIT-Choice Model	Pre-service teachers	Various	Various	605 under 20, 323: 21 - 25, 16 over 26	Eric
Aksu, M., Demir, C. E., Dalogul, A., Yildirim, S., Kiraz, E.	2010	Who are the future teachers in Turkey? Characteristics of entering student teachers	International Journal of Educational Development	Empirical	Quantitative	18226	Not stated	Turkey	Questionnaire	Pre-service teachers Student teachers	Various	Various	Not stated	Science Direct
Azman, N	2012	Choosing teaching as a career: perspectives of male and female Malaysian student teachers in training	European Journal of Teacher Education	Empirical	Quantitative	425	Not stated	Malaysia	Questionnaire	Pre-service teachers	Various	Undergraduate	20-35 (mean 21)	Reference search
Beltman, S., Wosnitza, M.	2008	"You are getting too old, find a man and marry": Social aspects of motivation to choose teacher education	Australian Journal of Educational & Developmental Psychology	Empirical	Mixed methodology	303	Not stated	Australia and Germany	Other	Student teachers	Early childhood and primary	Undergraduate	Mean: 22	Reference search
Bick Har, L	2012	Why do they want to become teachers? A study on prospective teachers' motivation to teach in Hong Kong	The Asia-Pacific Education Researcher	Empirical	Qualitative	38	Not stated	Hong Kong	Teachers	Graduating teachers	Various	Graduate	Not stated	Reference search
Bruinsma, M., Jansen, E. P. W. A	2010	Is the motivation to become a teacher related to the pre-service teachers' intentions to remain in the profession	European Journal of Teacher Education	Empirical	Quantitative	198	Not stated	The Netherlands	Survey	Pre-service teachers	Primary and Secondary	Various	29	Reference search
Bullough, R. V., Hall-Kenyon, K. M.	2011	The call to teach and teacher hopefulness	Teacher Development	Empirical	Quantitative	205	Not stated	USA	Survey	Pre-service, in-service teachers	Elementary	Undergraduate and graduate	Not stated	Previously identified

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Butt, G., MacKenzie, L., Manning, R	2010	Influences on British South Asian women's choice of teaching as a career: "You're either a career person or a family person; teaching kind of fits in the middle"	Educational Review	Empirical	Qualitative	18	Longitudinal	United Kingdom	Focus Groups, Face to face interviews	Pre-service teachers	Not stated	Undergraduate	Not stated	Eric
Chang-Kredl, S., Kingsley, S.	2014	Identity expectations in early childhood teacher education: Pre-service teachers memories of prior experiences and reasons for entry into the profession	Teaching and Teacher Education	Empirical	Qualitative	53	Not stated	Canada	Currere (life history and memory approach)	Pre-service teachers	Early childhood	First or second year undergrad students	19-42 (mean 23.1)	Manual Search
Chong, S., Low, E.L.	2008	Why I want to teach and how I feel about teaching - formation of teacher identity from pre-service to the beginning teacher phase	Educational Research for Policy and Practice	Empirical	Mixed methodology	94	Longitudinal	Singapore	Questionnaire and Scale	Pre-service teachers	Secondary	Post-graduate	Not stated	Previously identified
Chung, I. F., Yi-Cheng, H	2012	Still seeking for an "Iron Bowl"? Pre-service teachers' journeys of career choice in Taiwan.	Asia-Pacific Education Researcher	Empirical	Qualitative	6	Longitudinal	Taiwan	Focus Groups	Pre-service teachers	Elementary School teachers	Undergraduate	Not stated	Reference search
Cross, M., Ndofirepi, E.	2015	On becoming and remaining a teacher: rethinking strategies for developing teacher professional identity in South Africa	Research Papers in Education	Empirical	Qualitative	200	Not stated	South Africa	Narrative interview	Teachers	High School	Foundation Phase	Over 35	Google Scholar
Curtis, C	2012	Why do the choose to teach - and why to they leave? A study of middle school and high school mathematics teachers	Education	Empirical	Quantitative	1571	Not stated	USA	Survey	Teachers	Maths	Current teachers	Mean 42.5	Google Scholar

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Cushman, P	2006	It's just not a real bloke's job: male teachers in the primary school	Asia Pacific Journal of Teacher Education	Empirical	Qualitative	17	Not stated	New Zealand	Focus Groups	Teachers	Primary	Current teachers	26-53 (mean 38.8)	Manual Search
Dastidar, A. G., Skidar, S	2015	Occupation choices of high school and college students with special reference to teaching and research	Policy Futures in Education	Empirical	Quantitative	1821	Not stated	India	Survey	High School students and college students	Various	Undergraduate and senior school students	Not stated	Google Scholar
De Cooman, R., De Gieter, S., Pepermans, R., Du Bois, C., Caers, R., Jegers, M	2007	Graduate teacher motivations for choosing a job in education	International Journal for Educational and Vocational Guidance	Empirical	Quantitative	241	Not stated	The Netherlands	Questionnaire	Teachers and non-teachers	Various	Graduates	23.3	Reference search
Ejeh, M. U. C.	2005	Students' reasons for entering Nigerian primary teacher education and their career plans	Research in Education	Empirical	Quantitative	106	Not stated	Nigeria	Questionnaire	Student teachers	Primary teachers	Undergraduate	Not stated	Reference search
Eren, A., Tezel, K. V	2010	Factors influencing teaching choice, professional plans about teaching and future time perspective: A meditational analysis	Teaching and Teacher Education	Empirical	Quantitative	423	Not stated	Turkey	FIT-Choice Model	Student teachers	English	Undergraduate	Not stated	Science Direct
Flores, M.A., Niklasson, L	2014	Why do student teachers enrol for a teaching degree? A study of teacher recruitment in Portugal and Sweden	Journal of Education for Teaching	Empirical	Quantitative	269	Not stated	Sweden and Portugal	Self completed questionnaire	Student teachers	Preschool, Primary, Secondary	Undergraduate and Masters	21 - 60 years	Previously identified
Fokkens-Bruinsma, M., Canriuns, E. T.	2012b	The Factors Influencing Teaching (FIT)-Choice scale in a Dutch teacher education program	Asia-Pacific Journal of Teacher Education	Empirical	Quantitative	151	Not stated	The Netherlands	FIT-Choice Model	Pre-service	Secondary	Undergraduate	26	Reference search

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Fokkens-Bruinsma, M., Canriuns, E. T.	2014	Motivation for becoming a teacher and engagment with the profession: Evidence from different contexts	International Journal of Educational Research	Empirical	Quantitative	221	Not stated	The Netherlands	FIT-Choice Model	Pre-service teachers	Primary and Secondary	Undergraduate	Primary - 19 Secondary - 26	Science Direct
Fokkens-Bruinsma, M., Canriuns, E. T.	2012a	Adaptive and maladaptive motives for becoming a teacher	Journal of Education for Teaching	Empirical	Quantitative	136	Not stated	The Netherlands	FIT Choice Model	Pre-service teachers	Secondary	Undergraduate	26	Eric
Gao, X., Trent, J	2009	Understanding mainland Chinese students' motivations for choosing teacher education programmes in Hong Kong	Journal of Education for Teaching	Empirical	Qualitative	10	Longitudinal	China (Hong Kong)	Narrative interview	Student teachers	Not stated	Undergraduate	Not stated	Reference search
Gore, J. M., Holmes, K., Smith, M., Barron, R., Fray, L.	Forthcoming	Who wants to teach? Discourses of teacher selection and the aspirations of school students interested in teaching	-	Empirical	Mixed methodology	6000+	Longitudinal	Australia	Surveys, Focus Groups	Primary and High School Students	Not stated	Years 3 - 12 school students	Not stated	Previously identified
Graham, A., Erwin, K. D.	2011	"I don't think black men teach because how they get treated as students": High-achieving African American boys perceptions of teaching as a career option	Journal of Negro Education	Empirical	Qualitative	63	Not stated	USA	Phenomenological	High school students	Not stated	11th grade	Not stated	Eric
Green, R., Grieve, C	2007	Factors that influence the desire to become teachers of technology: An Australian study	TEACH: Journal of Christian Education	Empirical	Quantitative	337	Not stated	Australia	Questionnaire	Pre-service teachers	TAS teachers	Undergraduate	Not stated	Google Scholar

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Gu, M., Chan, L	2012	Motivation and commitment: Pre-service teachers from Hong Kong and mainland China at a training institute in Hong Kong	Teacher Education Quarterly	Empirical	Qualitative	20	Not stated	Hong Kong	Interviews	Student teachers	Various	Undergraduate	Not stated	Google Scholar
Heinz, M	2013	Why choose teaching in the Republic of Ireland? - Student teachers' motivations and perceptions of teaching as a career and their evaluations of Irish second-level education	European Journal of Educational Studies	Empirical	Quantitative	343	Not stated	Ireland	FIT-Choice Model	Student teachers	Various	Undergraduate	Not stated	Eric
Jarvis, J., Woodrow, D.	2009	Reasons for choosing a teacher training course	Research in Education	Empirical	Quantitative	483	Not stated	United Kingdom	Questionnaire	Trainee teachers	Various	Undergraduate	Not stated	Reference search
Jugovic, I., Marusic, I., Pavin Ivanec, T., Vidovic, V.V.	2012	Motivation and personality of preservice teachers in Croatia	Asia-Pacific Journal of Teacher Education	Empirical	Quantitative	374	Not stated	Croatia	Fit-Choice Model	Pre-service teachers	Various	Undergraduate and Post-graduate	19.6	Eric
Jungert, T., Alm, F., Thornberg, R	2014	Motives for becoming a teacher and their relations to academic engagement and dropout among student teachers	Journal of Education for Teaching	Empirical	Quantitative	333	Not stated	Sweden	Questionnaire	Student teachers	Secondary/elementary	First year undergrads	18-50 (Average 22.7)	Previously identified
Kilinc, A., Watt, H. M. G., Richardson, P. W.	2012	Factors influencing teaching choice in Turkey	Asia-Pacific Journal of Teacher Education	Empirical	Quantitative	1577	Not stated	Turkey	FIT-Choice Model	Pre-service teachers	Various	First year undergrads	19.9	Google Scholar

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Klassen, R.M., Al-Dhafri, S., Hannok, W., Betts, S.M	2011	Investigating pre-service teacher motivation across cultures using the Teachers' Ten Statements Test	Teaching and Teacher Education	Empirical	Qualitative	200	Not stated	Canada and Oman	FIT-Choice Model	Pre-service teachers	Elementary and secondary (Canada) Basic Education Cycle Two (age 11-16) (Oman)	Final year	Not stated	Previously identified
Konig, J., Rothland, R.	2012	Motivations for choosing teaching as a career: Effects on general pedagogical knowledge during initial teacher education	Asia-Pacific Journal of Teacher Education	Empirical	Quantitative	1287	Not stated	Germany	FIT-Choice Model	Pre-service teachers	Various	Undergraduate	23.7	Eric
Krecic, M. J., Grmek, M	2005	The reasons students choose teaching professions	Educational Studies	Empirical	Qualitative	237	Not stated	Slovenia	Questionnaire	Student teachers	Elementary and secondary	Second year undergrads	Not stated	Previously identified
Lai, K. C., Chan, K. W., Ko, K. W., & So, K. S.	2007	Teaching as a career: A perspective from Hong Kong senior secondary students	Journal of Education for Teaching	Empirical	Quantitative	1249	Not stated	Hong Kong	Self reported questionnaire	Secondary students	-	Secondary Seven Students (final year of school)	Not stated	Previously identified
Lawver, R. G., Torres, R. M	2011	Determinants of pre-service students' choice to teach secondary agricultural education	Journal of Agricultural Education	Empirical	Quantitative	145	Not stated	USA	FIT-Choice Model	Pre-service teachers	Agricultural	Undergraduate	Not stated	Google Scholar
Lin, E., Shi, Q., Wang, J., Zhang, S., Hui, L.,	2012	Initial motivations for teaching: Comparison between preservice teachers in the United States and China	Asia Pacific Journal of Teacher Education	Empirical	Quantitative	257 (USA) 542 (China)	Not stated	China and USA	FIT-Choice Model	Pre-service teachers	Elementary and Secondary	Not Stated	Mean age USA: 22.32 China: 23.37	Reference search

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Liu, P.	2010	Examining perspectives of entry-level teacher candidates: A comparative study	Australian Journal of Teacher Education	Empirical	Quantitative	66	Not stated	China and USA	Survey	Pre-service teachers	Elementary	Undergraduate	USA: 21.77 China: 18.4	Reference search
Lovett, S	2007	"Teachers of Promise": Is teaching their first career choice	New Zealand Annual Review of Education	Empirical	Mixed methodology	57	Longitudinal	New Zealand	Semi-structured interviews,	Pre-service teachers	Primary and Secondary	Various	Up to 50 years	Google Scholar
Low, E. L., Lim, S. K., Ch'ng, A., Goh, K. C.	2011	Pre-service teachers' reasons for choosing teaching as a career in Singapore	Asia-Pacific Journal of Education	Empirical	Quantitative	1064	Longitudinal	Singapore	Questionnaire	Pre-service	Primary and Secondary	Undergraduate and Post-graduate	Mean 20.73 - 25.65	Eric
Manuel, J., Brindley, S.	2005	The call to teach: Identifying pre-service teachers' motivations, expectations and key experiences during initial teacher education in Australian and the United Kingdom	English in Australia	Empirical	Qualitative	52	Longitudinal	Australia, United Kingdom	Interviews	Pre-service	Secondary English teachers	Post-graduate	Not stated	Google Scholar
Manuel, J., Hughes, J.	2006	It has always been my dream': Exploring pre-service teachers' motivations for choosing to teach	Teacher Development	Empirical	Mixed methodology	79	Not stated	Australia	Questionnaire	Pre-service teachers	Secondary	Third year students of a five year degree	65% aged between 20 and 21 years	Previously identified
McKenzie, P., Santiago, P., Sliwka, P., Hiroyuki, H.	2005	Teachers matter: Attracting, developing and retaining effective teachers	OECD Report	Empirical	Mixed methodology	25 Countries	Not stated	25 Countries	Analytical Review, Country Review	Various	Various	Not Stated	Not stated	Google Scholar
McKenzie, P., Weldon, P. R., Rowley, G., Murphy, M., McMillian, J.	2014	Staff in Australia's schools 2013: Main report on the survey	ACER Report	Empirical	Quantitative	5213 Primary 10349 Secondary	Not stated	Australia	Survey	Teachers	Various	Teachers	Not stated	Previously identified

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Menzies, L., Paramenshwaran, M., Trethewey, A., Shaw, B., Baars, S., & Chiong, C.	2015	Why Teach?	Report	Empirical	Mixed methodology	1009	Not stated	United Kingdom	Questionnaire and Case Studies	Teachers	Various	Various	Not stated	Previously identified
Mtika, P., Gates, P.	2011	What do secondary teachers say about teaching as a profession of their "choice" in Malawi?	Teaching and Teacher Education	Empirical	Qualitative	14	Not stated	Malawi	Interviews	Trainee teachers	Secondary	Second and Third year	18-36	Science Direct
Müller, K., Alliota, R., & Benninghoff, F.	2009	Attracting and retaining teachers: A question of motivation	Educational Management Administration & Leadership	Empirical	Quantitative	306	Not stated	Switzerland	Survey	Student teachers	Not stated	Not Stated	Not stated	Reference search
Mwamwenda, T. S	2010	Motives for choosing a career in teaching: A South African Study	Journal of Psychology in Africa	Empirical	Quantitative	232	Not stated	South Africa	Questionnaire	Student teachers	Not stated	Not Stated	18-44 (mean 23)	Reference search
Neugebauer, M	2015	Who chooses teaching under different labor market conditions? Evidence from West Germany 1980-2009	Teaching and Teacher Education	Empirical	Quantitative	-	Not stated	Germany	Statistical analysis	-	-	-	-	Science Direct
OECD	2012	What kinds of careers do boys and girls expect for themselves	PISA in Focus (Report)	Empirical	Quantitative	-	Not stated	Various	PISA	-	-	-	15 year olds	Google Scholar
Olsen, B.	2008	How reasons for entry into the profession illuminate teacher identity development	Teacher Education Quarterly	Empirical	Qualitative	6	Not stated	USA	Semi-structured interviews	Recent graduates	Secondary English teachers	Not Stated	Not stated	Reference search
Osguthorpe, R., Sanger, M.	2013	The moral nature of teacher candidates beliefs about the purposes of schooling and their reasons for teaching as a career	Peabody Journal of Education	Empirical	Mixed methodology	359	Not stated	USA	Content analysis and questionnaire	Students	Not stated	Undergraduate	Not stated	Reference search

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Parkes, K. A., Jones, B. D.	2012	Motivational constructs influencing undergraduate students' choices to become classroom music teachers or music performers	Journal of Research in Music Education	Empirical	Quantitative	270	Not stated	USA	Online questionnaire	Students	Music	Undergraduate	Not stated	Reference search
Pop, M.T., Turner, J.E.	2009	To be or not to be....a teacher? Exploring levels of commitment related to perceptions of teaching among students enrolled in teacher education programs	Teachers and Teaching	Empirical	Mixed methodology	67	Not stated	USA	Survey, Indepth interviews	Pre-service teachers	Various	Undergraduate	21-35 years	Reference search
Richardson, P. W., Watt, H.M.G	2006	Who chooses teaching and why? Profiling characteristics and motivations across three Australian Universities	Asia-Pacific Journal of Teacher Education	Empirical	Quantitative	1635	2 years	Australia	FIT-Choice Model	Pre-service teachers	Early childhood, Primary, Secondary	Graduate, undergraduate @ UWS, Monash and USYD	Undergrads - mean 19/20. Grads - mean 25/26	Previously identified
Richardson, P. W., Watt, H.M.G	2005	I've decided to become a teacher': Influences on career change	Teaching and Teacher Education	Empirical	Mixed methodology	74	Not stated	Australia	Survey, Interviews	Pre-service	Secondary	Graduate entry students	Not stated	Previously identified
Roness, D., Smith, K.	2010	Stability in motivation during teacher education	Journal of Education for Teaching	Empirical	Quantitative	179	Not stated	Norway	Questionnaire	Students	Various	Post-graduate	29.5	Reference search
Sali, P	2013	Understanding motivations to become teachers of English: ELT Trainees' perceptions	Procedia: Social and Behavioral Sciences	Conference Proceeding	Qualitative	100	Not stated	Turkey	The Teachers' Ten statements Test	Pre-service teachers	English Language Teaching (ELT)	Undergraduate	Second year	Reference search
Santoro, N	2010	If it weren't for my mum...' the influence of Australian Indigenous mothers on their children's aspirations to teach	Gender and Education	Empirical	Qualitative	50	Not stated	Australia	Qualitative	Teachers or former teachers	Various	Current or former teachers	Not stated	Previously identified

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Sinclair, C	2008	Initial and changing student teacher motivation and commitment to learning	Asia-Pacific Journal of Teacher Education	Empirical	Mixed methodology	211	5 months	Australia	MOTS Survey (Motivational Orientations to Teach Survey)	Student teachers	Primary	First year undergrads	From 19 years	Previously identified
Sinclair, C., Dowson, M., McInerney, D.M.	2006	Motivations to teach: Pscyhometric perspectives across the first semester of teacher education	The Teachers College Record	Empirical	Quantitative	98	Not stated	Australia	Modified Orientation to Teach Survey (MOTS)	Pre-service teachers	Not stated	Undergraduate	18-45 (mean 26)	Google Scholar
Skelton, C	2009	Failing to get men into primary teaching: A feminist critique	Journal of Education Policy	Empirical	Qualitative	20	Not stated	United Kingdom	Interviews	Teachers	Primary	Current teachers	Not stated	Reference search
Smethem, L	2007	Rentention and intention in teaching courses: weill the new generation stay?	Teachers and Teaching	Empirical	Qualitative	18	Not stated	United Kingdom	Interviews	Teachers	Secondary	Current teachers	Not stated	Reference search
Spittle, M., Jackson, K., Casey, M.	2009	Applying self-determination theory to understand the motivation for becoming a physical education teacher	Teaching and Teacher Education	Empirical	Quantitative	324	Not stated	Australia	Questionnaire	Pre-service teachers	Secondary	Undergraduate	18-38	Previously identified
Spittle, S, Spittle, M.	2014	The reasons and motivation for pre-service teachers choosing to specialise in primary physical education teacher education	Australian Journal of Teacher Education	Empirical	Quantitative	248	Not stated	Australia	Questionnaire	Pre-service	Primary	Undergraduate	21.24	Reference search
Struyven, K., Jacobs, K., Dochy, F	2013	Why do they want to teach? The multiple reasons of different groups of students for undertaking teacher education	European Journal of Psychology of Education	Empirical	Quantitative	1805	Not stated	Belgium	Learning and Studying Questionnaire (LSQ) SAS	Pre-service teachers	Primary	First year undergrads	17-48 years	Google Scholar

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Thomson, M. M., Turner, J. E., Neitfield, J. L.	2012	A typological approach to investigate the teaching career decision: Motivations and beliefs about teaching of prospective teacher candidates	Teaching and Teacher Education	Empirical	Mixed methodology	215	Not stated	USA	Semi-structured interviews, Surveys	Prospective teachers	Various	Undergraduate	18-41 years	Previously identified
Topkaya, E. Z.	2012	Choosing teaching as a career: Motivations of Pre-service English teachers in Turkey	Journal of Language Teaching and Research	Empirical	Quantitative	207	Not stated	Turkey	FIT-Choice Model	Pre-service teachers	Various	Undergraduate	Not stated	Reference search
Watt, H. M. G & Richardson, P. W	2012	An introduction to teaching motivations in different countries: Comparisons using the FIT-Choice scale	Asia Pacific Journal of Teacher Education		Mixed methodology	1653	Longitudinal	Australia	FIT-Choice Model	Pre-service teachers	Early childhood, primary, and secondary	Undergraduate and Graduate	Not stated	Reference search
Watt, H. M. G & Richardson, P. W	2007	Motivational factors influencing teaching as a career choice: Development and validation fo the FIT-choice scale	Journal of Experimental Education	Empirical	Quantitative	1434	Longitudinal	Australia	FIT-Choice Model	Pre-service teachers	Various	Undergrad, Masters (during their degree and conclusion of degree)	Not stated	Previously identified
Watt, H. M. G & Richardson, P. W	2008	Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers	Learning and Instruction	Empirical	Mixed methodology	510	Longitudinal	Australia	FIT-Choice Model	Pre-service teachers	Various	Graduate entry students	Not stated	Previously identified
Watt, H. M. G, Richardson, P. W, Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., Baumert, J	2012	Motivations for choosing teaching as a career: An international comparison of the FIT choice model	Teaching and Teacher Education	Empirical	Mixed methodology	Australia: 1438, US: 511, Germany: 210, Norway: 131	Longitudinal	Australia, USA, Norway, Germany	FIT-Choice Model	Pre-service teachers	Various	Undergraduate	Not stated	Previously identified

Table 10. Articles and studies included in the review

Author	Year	Title	Journal	Literature Type	Approach	Sample Size	Duration	Context	Methods	Type	Teacher Type	Sample	Age (mean)	Source
Wong, A.K.Y., Tang, S.Y.F., Cheng, M.M.H	2014	Teaching motivations in Hong Kong: Who will choose teaching as a fallback career in a stringent job market	Teaching and Teacher Education	Empirical	Mixed methodology	132	Not stated	Hong Kong	Questionnaire, Interviews	Pre-service	Various	Post-graduate	20 years +	Science Direct
Yüce, K., Şahin, E., Koçer, Ö., & Kana, F.	2013	Motivations for choosing teaching as a career: A perspective of pre-service teachers from a Turkish context	Asia Pacific Education Review	Empirical	Mixed methodology	283	Not stated	Turkey	Questionnaire	Pre-service teachers	-	1st and 2nd grade preservice teachers	18-26 years (mean 22.3)	Previously identified

© Queensland College of Teachers 2016

Copyright in this publication is owned by or licensed to the State of Queensland (acting through the Queensland College of Teachers).

No part may be reproduced, communication, modified or stored, without the written permission of the Queensland College of Teachers.

Any copyright or permission inquiries should be addressed to:

Executive Manager, Registration
Queensland College of Teachers
GPO Box 702
Brisbane QLD 4001

Phone: (07) 3377 4777
Email: enquiries@qct.edu.au

