Faculty of Social Sciences - Papers (Archive)　　　Faculty of Arts, Social Sciences & Humanities

2019

"A Passion and Enthusiasm to Bring out the Best in All": Regional Candidate Teacher Motivations

Lynn D. Sheridan
University of Wollongong, lynns@uow.edu.au

"A Passion and Enthusiasm to Bring out the Best in All": Regional Candidate Teacher Motivations

Abstract

In this study the career motivations and values of regional candidate teachers are investigated using a mixed methodology. Expectancy-value theory (Wigfield & Eccles, 2000) supports the understanding of motivations through the use of four key value categories: interest, utility, attainment and cost. A total of 135 pre-service teachers were surveyed using a modified survey instrument. This study addresses a gap in career motivational literature by exploring the motivations of regional teacher candidates. Current research indicates that quality staffing in Australian regional schools remains a significant concern. Findings indicated that candidates' motivations tended to be aspirational, yet there also exist strong pragmatic imperatives for choosing teaching. Career motivations were aligned to job opportunities in local communities, as well as the desire for social contribution. The findings have implications for university programs in terms of developing teacher agency and supporting career pathways.

Keywords

Disciplines

Education | Social and Behavioral Sciences

Publication Details

"A Passion and Enthusiasm to Bring out the Best in All": Regional Candidate Teacher Motivations

Lynn Sheridan
University of Wollongong

Abstract: In this study the career motivations and values of regional candidate teachers are investigated using a mixed methodology. Expectancy–value theory (Wigfield & Eccles, 2000) supports the understanding of motivations through the use of four key value categories: interest, utility, attainment and cost. A total of 135 pre-service teachers were surveyed using a modified survey instrument. This study addresses a gap in career motivational literature by exploring the motivations of regional teacher candidates. Current research indicates that quality staffing in Australian regional schools remains a significant concern. Findings indicated that candidates' motivations tended to be aspirational, yet there also exist strong pragmatic imperatives for choosing teaching. Career motivations were aligned to job opportunities in local communities, as well as the desire for social contribution. The findings have implications for university programs in terms of developing teacher agency and supporting career pathways.

Introduction

Staffing of schools in regional locations remains a persistent challenge in Australian education (Downes & Roberts, 2017; Lyons, 2009) and internationally (Lyons, Joon-Yul, & McPhan, 2009). The geographical imbalance in the demand and supply of teachers is mainly due to vast distances between regions and the largely urbanised populations and has contributed to inequities in education in Australia (Savage, 2016). While Australian city centres continue to grow, the regional areas often experience high unemployment, low school retention rates, contraction of services and amenities, rising debt, anxiety and suicide (Gabriel, 2002; Jenkins & Cornish, 2015). The impact is that an increasing number of regional young people choose not to work in regional and remote locations (Davies, 2008; Jenkins & Cornish, 2015). This is a concern for regional areas where there is often a greater need for quality teachers, considered crucial in addressing inequalities in student outcomes (ACARA, 2016; Smith, Parr, & Muhidin, 2019).

Much of the research in career motivation has focused extensively on metropolitan teachers, who they are, and why they choose teaching (Bruinsma & Jansen, 2010; Moran, Kilpatrick, Abbott, Dallat, & McClune, 2017; Richardson & Watt, 2006; 2010; Watt & Richardson, 2012; Watt, Richardson, & Wilkins, 2014). Less is known on why someone might choose to teach and live in a regional location and how their values influence career decisions (Watt, Richardson, & Wilkins, 2014).

Regional teachers are known to be valued as they assume prominent roles in local communities (Arnold, Newman, Gaddy, & Dean, 2005; Burton & Johnson, 2010). Teachers from regional backgrounds often have a strong personal motivation to work as teachers in their communities (Burton & Johnson, 2010; Kline & Walker-Gibbs, 2015; Lester, 2011).

They are motivated to become teachers, seeing it as a real "opportunity for their own upward class mobility, as well as bringing about social change" for their communities (Santoro, 2010, p. 419). They value the personal connections they are able to create in small regional centres which enhances their sense of identity as a teacher (Hong, 2010).

Yet motivations are complex, often influenced by external conditions and differing contexts (Beauchamp & Thomas, 2009; Thomas & Beauchamp, 2007). Values are instrumental in career choice, particularly in teaching where they are often implicitly employed (Fives & Buehl, 2012), often understated (Low, Hui, & Cai, 2017), and underdeveloped (Sanger & Osguthorpe, 2011). An understanding of candidates' motivations is regarded as important in preparing candidates to teach in regional schools (Roberts, 2004). Chua, Liu, and Chia (2018) see motivational visibility as central in the development of teacher quality. It is thus imperative to consider and make visible candidates' motivations (Bowles, Hattie, Dinham, Scull, & Clinton, 2014).

Candidates' career motivations present as a myriad of interpretations often based in contexts, yet increasingly these motivations impact teaching career pathways, retention and teaching success (Sunley & Locke, 2010). Current government policies are focused on the quality of initial teacher education (ITE) (Australian Institute for Teaching and School Leadership [AITSL], 2015; Council for the Accreditation of Educator Preparation [CAEP], 2014). This has led to ITE providers developing selection frameworks aimed at attracting candidates in regional and remote locations with the 'right' attributes for teaching (NSWCDE, 2017). These policies aim to address compliance in terms of a robust assurance of teachers' classroom readiness (AITSL, 2015; TMAG, 2014), and inequalities between tertiary opportunity and attainment in the capital cities and regional centres (Koziol, 2018).

The focus of this paper is on understanding the motivations of regional candidate teachers. Research indicates high teacher turnover and difficulties in recruitment and retention in regional schools (Kutsyuruba & Treguna, 2017; Reid, Green, Cooper, Hastings, Lock & White, 2010). According to Guarino, Santibanez, and Daley (2006), teaching in regional areas is often a balance of the practicalities with the esoteric, with career decisions becoming pragmatic and/or logistical (Plunkett & Dyson, 2011). The myriad of motivations adds to the complexity in attracting, preparing and supporting teacher candidates to work and live in regional areas. In addition, understanding career motivations has implications for teacher recruitment and career planning. This is particularly the case with the high turnover of teachers in non-metropolitan locations, often six times higher than city schools (Lyons, Cooksey, Panizzon, Parnell, & Pegg, 2006). In terms of attracting and retaining teachers, Kelly and Fogarty (2015) recommend an integrated approach, suggesting that candidate teachers need specific knowledge, values and attitudes as well as general attributes, particularly resilience. Retaining graduate teachers who want to work and live in regional areas is an issue for all stakeholders (Green & Reid, 2004), and important future work for universities (Australian Government, 2017; White & Reid, 2008).

Why Teaching?

Socialisation and previous experiences are important career motivational factors when choosing to become a teacher (Richardson & Watt, 2006; Watt & Richardson, 2012). With individual career choice often influenced by the context, culture, gender and age (Flores & Day, 2006; Watt & Richardson, 2012). Teacher candidates choose teaching for a range of reasons, with common agreement on motivations (Bruinsma & Jansen, 2010; Moran et al., 2017; Richardson & Watt, 2006, 2010; Ng, Nicholas, & Williams, 2010; Watt & Richardson, 2012). Research categorises motivation into three motivational types: extrinsic (benefits of

the job); intrinsic (rewarding career); and altruistic (help students) (Bastick, 2000; Gore, Barron, Holmes, & Smith, 2016; Kyriacou & Coulthand, 2017; Watt & Richardson, 2012).

Regardless of motivations, for many candidates there is not always a seamless transfer into teaching with many struggling with job security, poor attitudes, value conflicts and preconceived notions (Howes & Goodman-Delahunty, 2015; Livingston, 2018). It is suggested that candidates' motivational profiles may not necessarily reveal which candidates will be psychologically robust teachers, or who will be effective teachers (Watt, Richardson & Wilkins, 2014). Differing groups have varying motivational reasons for entering teaching, from viewing teaching as socially meaningful (Watt & Richardson, 2006; 2012), to seeking intellectual fulfilment or job security (Gore et al., 2016; Moran et al., 2017). Regardless of an individual's motivation, it is their social experiences, their personality construct and self-schema that predict how an individual assigns value and makes career choices (Campbell & Yates, 2011).

Richardson and Watt's (2010) research indicated that "there is a need to understand the core values, beliefs and expectancies that attract people into teacher education…" (p. 195). In addition, the "promotion of teacher agency does not just rely on the beliefs that individual teachers bring to their practice, but also requires collective development and consideration" (Biesta, Priestley, & Robinson, 2015, p. 624). However, a teacher's values are crucial for commitment and motivation, often seen as an interplay between the personal and professional identity (Day, Kington, Stobart, & Sammons, 2006; Flores & Day, 2006; Hong, 2010). The desire to become a teacher may not necessarily indicate an individual's suitability; as a successful teacher needs to display agency, capacities, and the right motives to ensure success in the classroom (Sinclair, Dowson, & Thistleton-Martin, 2006; Bruinsma & Jansen, 2010).

In order to select and prepare teachers who will thrive in regional locations it is necessary to consider the values they bring into the profession (Durksen & Klassen, 2018). Current initiatives are aimed at attracting regional candidates who want to stay and work in local regions (Handal, Watson, Petocz, & Maher, 2013; Jenkins & Cornish, 2015; White, 2011). Yet, teaching and living in regional locations is often complex, with research indicating that teachers continue to face considerable personal and professional challenges (geographic and social isolation, access to permanent work, professional learning, teaching expertise and community expectations) (Day & Hong, 2016; Downes & Roberts, 2017; Howes & Goodman-Delahunty, 2015).

In order to add to our understanding of career retention, particularly regional candidates, the present study aims to investigate the relationship between candidates' values and teaching motivations. Insights into the reasons why teacher candidates choose to live and stay in regional communities will serve as important knowledge for informing teacher education, career planning, and retention, particularly in hard to staff regional locations.

Conceptual Framework

In exercising personal career choice social cognitive career theory proposes two complementary variables. The first, involves cognitive personal variables (self-efficacy, outcomes expectations & personal goals) and the second, considers variables such as physical and or personal attributes (sex, race, age, & the teachers' learning experiences & interests) (Lent & Brown, 2006). Central to exercising personal career agency is an individual's belief about their own capabilities, which is critical to determining motivations, affect, and actions (Bandura, 1989). Career choice is "regulated by forethought embodying recognised goals and influenced by self-appraisal of capabilities" (Bandura, 1989, p. 1175). The higher the goals,

the firmer their commitment and the longer their perseverance, with chosen goals acting to motivate candidates to pursue preferred career options (Lent & Brown, 2006).

Self-efficacy beliefs affect thought patterns that may be self-aiding or self-hindering, with feelings of competency and autonomy important for intrinsic career motivation (Gagne & Deci, 2005). According to Bandura (1989), ordinary social realities; impediments, failures, adversities, inequities, set-backs and frustrations require an optimistic sense of self-efficacy. Ryan and Deci (2000) suggest that greater autonomous extrinsic motivation is associated with engagement and retention, as motivation operates within a broad array of socio-structural influences that provide meaning, purpose, and a feeling of belonginess and connectedness, central to career motivation (Gagne & Deci, 2005).

One of the major frameworks of achievement motivation is Expectancy–value theory, with the most recent work by (Eccles et al., 1983; Eccles, 2009; Wigfield & Eccles, 2000). This theory was adopted as it was most useful in understanding candidates' career-related choices, values and expectations. Expectancy–value theorists argue that individuals' career choice can be "explained by their beliefs and how well they do on specific tasks, and the extent to which they value the task" (Wigfield & Eccles, 2000, p. 68). This theory considers values to be "the centrality of teacher motivations, integral to teachers' goals, beliefs, perceptions, aspirations, and behaviours" (Richardson & Watt, 2010, p. 139). These social cognitive variables are influenced by an individual's career goals, self-schema and effective memories, and directly impact performance, effort and persistence for career choice (Watt & Richard, 2007).

The most current versions of the theory claims that career choice is thought to be influenced by "both negative and positive task characteristics", with all career choices having associated costs precisely for the reason that one choice excludes other options (Eccles & Wigfield, 2002, p.118). Consequently, the relative value and probability of success of teaching as a career option, becomes a key determinant of choice. Choice, in regard to Bandura (1989) is measured in terms of personal efficacy expectations, in contrast to Expectancy–value theory which focuses on outcome expectations. Thus, the teacher candidate's ability beliefs are perceived as an expectation of success in a teaching career. In Eccles et al., (1983) theory, values and ability beliefs and one's expectation for success, are the most important motivations for predicting career choice. Personal values emerged as the most powerful predictor of choice, whereas ability/expectation beliefs are considered better predictors of performance. Expectancy–value theory provided an overarching theoretical framework to guide research into regional candidates' motivations for choosing teaching as a career. This theoretical framework comprises of three major components for explaining career choice: (1) psychological component (competency beliefs); (2) biological component (behavioural genetics); and (3) socialisation component (social, culture, context) (Eccles et al.,1983; Eccles, 2009). Eccles et al., (1983) grouped motivational values into four value categories: interest, utility, attainment and cost.

1. *Interest values* – enjoyment from engaging with young people or the interest in subject area/activity
2. *Utility value* – usefulness of career in achieving personal goals
3. *Attainment value* – important in contributing or making a difference to others' lives
4. *Cost value* – both positive and negative costs in terms of psychological, economic and social position as a result of career choice.

In order to increase our understanding of regional candidate teachers' career motivations, this research investigated candidates' values using the definition of Eccles et al., (1983). Therefore, the research question is: *What are the regional candidate teacher's career motivations and how are they interrelated?*

Method

This study presents findings from the first survey instrument of a longitudinal study that aims to track the progression of regional candidate teachers, in a new two-year Master of Teaching Degree, from entry into the profession. It focuses on the interrelationship of candidates' motivations for choosing teaching. For the purposes of this paper Regional includes all of the towns, small cities and areas that lie beyond the major capital cities (Sydney, Melbourne, Brisbane, Perth, Adelaide & Canberra) (Regional Australia Institute [RAI], n.d.).

Survey Development

Data collection used a validated online survey instrument that was modified to suit the context and taken with permission from a study on *The Effectiveness of Teacher Education* (SETE) (Mayer et al., 2012). Survey Instrument 1 (used for this paper) was comprised of 5 sections:1-3 demographics; 4 and 5 self-reflection, values and future plans.

The instrument used quantitative questions with a five-point Likert scale (strongly agree – strongly disagree) and single choice and qualitative open-ended questions requiring an extended response. Minor modifications were made to ensure relevance to the context (primary and secondary, multi-campus, regional). Open-ended questions were added to ask participants' views on their values in terms of: *teacher qualities* (TQ); *professional practices* (PP); and *personal attributes*) they believed they brought into teaching.

Demographic data were collected on the teachers': age, gender, ethnicity, campus location, selected program (primary or secondary), schedule (part-time full-time or combination), prior study, work experience and other qualifications. The instrument was trialled using ($n = 20$) teachers from an undergraduate teaching program. In response, minor modifications were made to ensure clarity and contextual relevance. The researcher considers this adequate as most of the questions in this survey were taken from the original validated instrument (SETE, 2012).

Participants

The context for this study was a multi-campus university with four small campuses (25 or less students) situated up to 6 hours away from the main campus. The main regional campus was one and half hours from a capital city. The participants in this study were located in five separate locations (different campuses) along 500km of the south east coast of Australia. The geographic isolation of the campuses meant that there was a higher unemployment and underemployment in the local areas. Youth unemployment is 18.4%, with a national average of 12% (BoSL, March, 2018). The ITE program was delivered face to face on each of the five regional campuses (see Table 1).

The candidate teachers who participated in this study were post graduate and lived or had selected to study teaching in regional locations. There was a total of 135 invited participants in the study. Ethics approval was sought and granted with all participants de-identified.

The conceptual framework adopted for this study considers an individual's values to be central to career motivations, aspirations and behaviours. This framework was useful for enhancing understanding of the influence of candidates' values on career motivations. By

connecting the data sets (quantitative & qualitative), the researcher was able to gain a deeper understanding of the interrelationship of candidates' career motivations.

Quantitative Data Collection and Analysis

To gather participants' views the survey was distributed via Survey Monkey across the five campuses in the first week of the program. A sample size (n=135) was used, with 111 responses available after incomplete returns were deleted from the analysis, and no outliers were identified. Analysis of the data included descriptive statistics, factor analysis, correlations, and a series of one-way ANOVAS was conducted using SPSS (Version 24) software.

Descriptive frequency (%) testing was used to identify general observations on the participants (age, location, motivations). Statistical analyses were conducted on the Likert-scale data items in survey Sections 1-3.

Initially a four-factor analysis was used to identify key factors in career motivations of candidates. It was re-run with a forced two-factor solution on the twelve (12) items selected. The decision to select a 2 rather than 4 factor solution was consistent with the conceptual framing, allowing the grouping of similar items and provided the clearest structure. The minimum data for a factor analysis was satisfied with 111 subjects in the total sample (Cohen, Manion, & Morrison, 2018). The checking for normality and univariate outliers showed that all variables skewed with some kurtosis. A simple histogram conformed sufficiently to a normal curve of distribution.

A bivariate correlation test using Pearson product-moment correlations was conducted to determine relationships with F1 (Pragmatic), F2 (Aspirational) and other variables (age, sex, study schedule, program type, country of origin, Aboriginal and Torres Strait Islander (ATSI) status, qualifications and campus location, as either a positive (high/high or low/low) correlation or negative (high/low or low/high) correlations. Nonparametric testing used $p=0.014$(two-tailed) and Spearman's rho=.221, to confirm reliability of the data.
A series of One-Way analysis of variance (ANOVA) with the purpose of detecting differences in motivations between participant groups and campus location, age, sex, program type and ATSI with the two factors from the factor analysis.

Qualitative Data Collection and Analysis

Qualitative responses were collected from three open-ended questions on the survey instrument. The participants were asked to identify the 'qualities' they valued and believed they brought with them into teaching. For the purpose of this paper, quality categories are defined as:
Teacher Qualities (TQ) – characteristics and behaviours that contribute to teacher effectiveness and student achievement (Strong, Ward, Tucker, & Hindman, 2007).
Professional Practices (PP) – skills in planning, preparation of learning, establishing conducive learning environments, instructional techniques for learning and professional responsibilities (parents, reporting) Danielson (1996) (as cited in Danielson & McGreal 2000).
Personal Attributes (PA) – dispositions, inherent traits, tacit knowledge, interpersonal qualities (Sheridan & Tindall-Ford, 2018).

Each question was initially analysed using Survey Monkey to generate content word clouds. This form of content analysis summarises words from the comments through a form of visualisation. The method is useful in guiding more in-depth analysis and adds clarity

during text analysis of initial data results (Cidell, 2010). Terms from the word clouds were then compiled to form common ideas for each of the three questions, inductively developed and described as emerging ideas. In order to group common ideas under key themes (Braun & Clarke, 2006), the researcher revisited the participants' original responses. The themes were aligned to the Eccles et al., (1983) value categories and supported with data segments. To support the emphasis on specific themes, frequency of response for each was included (see Appendix A, Table 5).

Connecting Quantitative and Qualitative Data

To ascertain the interrelationships of career motivations it was useful to connect quantitative and qualitative data. According to Hesse-Biber and Leavy (2010), methods triangulation "ultimately fortifies and enriches a study's conclusions" (p. 4). In taking this approach the researcher looked for a convergence of the data to enhance credibility of the findings. The process of connecting the data sets involved aligning the value categories to key themes, data segments and to the most appropriate Factors. This method of triangulation converged quantitative to qualitative data and provided the researcher with information on the interrelationship between the data sets. The analysis process was initially conducted by the author, and then reviewed by two other colleagues to ensure reliability.

Results

Table 1 shows the demographics of the cohort. Overall there were slightly more females (58%) than males (42%) who entered the program. Most of the candidates came from an English-speaking background (89%) with 4% of the cohort identified as ATSI.

Program		Frequency (%)	N	Missing (%)
	Primary	54 *(41.2)*	131	4(3)
	Secondary	77 *(58.8)*		
Campus	Large Campus (1)	100 *(76.9)*	130	5(3.7)
	Small Campus (2)	10 *(7.7)*		
	Small Campus (3)	5 *(3.8)*		
	Small Campus (4)	14 *(10.8)*		
	Small Campus (5)	1 *(.7)*		

Table 1: Degree Type and Campus Location

Fifty percent of the candidates come into the degree with prior trade or industry experience. Of this 50%, 49% had retail or hospitality experience and 25% had education experience. The remaining 50% were straight from undergraduate study with only part-time casual work experience.

Motivation for Teaching

The main motivation for choosing teaching was aspirational: (5) w*anting to make a difference*, with the next two aspirations being: (6) *wanting to work in area of interest and;* (1) *wanting to teach children*. A secondary reason for choosing teaching was pragmatic, with reasons such as: *holidays, work overseas, career advice, job opportunities, parents were teachers, location,* being of lesser importance to the participants. Teaching as (12) *a back-up plan* and (3) *grade point average* results were ranked the lowest (see Figure 1).
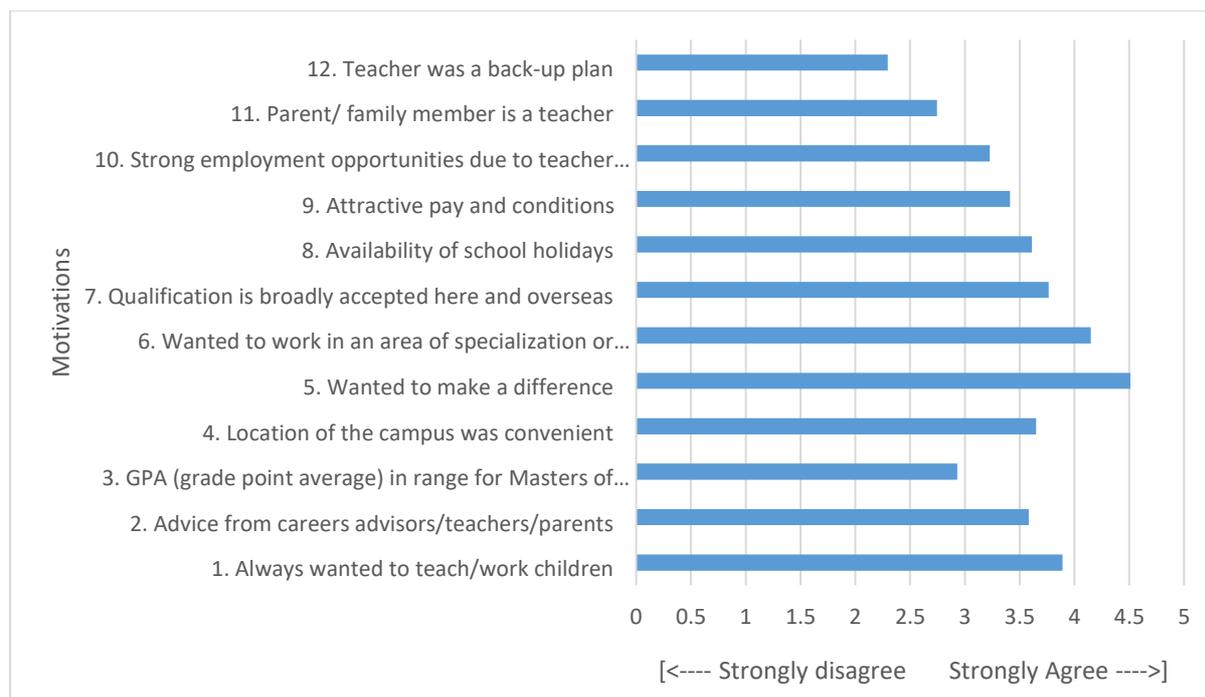
Figure. 1: Reasons for Studying Teaching.

Factor Analysis

Factor analysis was used to gain an understanding of the candidates' overall motivations for choosing teaching. The Kaiser-Meyer-Olkin Measure of Sampling adequacy value was above the commonly recommended .6 value (675) and the Bartlett's test of sphericity was significant $\chi^2(66) = 353.700, p < .000$. The result ensured reliability of results (Cohen et al., 2018, p. 820). The diagonals of the anti-image correlation matrix were also all above .5 and finally the commonalities were all above .3. The factors that emerged from the data showed participants' reasons for choosing teaching. A final 2-factor solution which explained 34.60 % of the variance was preferred because: (a) it is consistent with the conceptual framework; (b) the small number of items; and (c) the analysis of the scree plot indicates two reliable components in the slope provided further support for selecting 2-factors over the 4-factor solution (see Table 2).

Items	Factors	
	1 Pragmatic Motivations	2 Aspirational Motivations
1. Availability of school holidays	**.752**	
2. Attractive pay and conditions	**.706**	
3. Teacher was a back-up plan	**.610**	
4. Strong employment opportunities due to teacher shortages	**.520**	
5. Qualification is broadly accepted here and overseas	.436	.335
6. Parent/ family member is a teacher	**.407**	
7. Location of the campus was convenient	**.405**	
8. Always wanted to teach/work children		**.659**

9. GPA (grade point average) in range for Masters of teaching	.322	**.552**
10. Advice from careers advisors/teachers/parents		**.380**
11. Wanted to make a difference		**.332**
12. Wanted to work in an area of specialization or interest		**.295**

Table 2: Two Factor Solution: Factor 1 (Pragmatic Motivations), Factor 2 (Aspirational Motivations)

Factor 1 identified pragmatic motivations (employment, suits my family, while F2, identified aspirational motivations (work & travel, interest, for selecting teaching as a future career.

Item 5 – *qualification is broadly accepted here and overseas* is regarded as a complex variable as it appeared in both factors. Item 9 – *GPA (grade point average) in range for Master of Teaching* loaded on both factors (is <.3 for both). This item is clearly higher for Factor 2 (aspirational motivation). Overall, variables were well defined by the factor solution as most items had a communality value of 0.40 or above. Inspection of the rotated component matrix revealed moderate to high loadings for each item on at least one factor. Findings clearly showed two separate areas of motivation for the teacher candidates (gender/age & program type).

Bivariate correlations identified a relationship – significant, small to moderate correlation between *gender* and F2 (aspirational reasons for becoming a teacher). The nonparametric test used *p*=0.014 (two-tailed), Spearman rho=.221 showed that the results were higher for F2 scores related to being female. This was important in considering the differences in motivations between the genders. The positive correlation between gender and F2 for women was more common at the smaller regional campuses (see Table 3). This has implications for how to improve opportunities for females in small regional universities in regard to career satisfaction.

Variables	Age	Sex	CoO	ATSI	Program type	Campus Location	Schedule	Other Qual.
F2 Aspirational	-.160	.221*	-.085	.105	-.214*	.019	.061	-.001
	.102	.013	.347	.245	.016	.837	.500	.988
F1 Pragmatic	-.119	.070	-.002	-.013	.019	.019	-.145	-.133
	.225	.441	.983	.885	.837	.831	.107	.142
Age		-.034	.129	.252**	-.181	.198*	-.003	-.050
		.718	.170	.007	.058	.038	.973	.612
Sex			-.002	.169	-.203*	.224*	.000	-.166
			.983	.050	.020	.010	1.000	.062
Country (CoO)				-.028	-.005	.108	.000	-.053
				.750	.957	.221	1.000	.553
(ATSI)					-.124	.214*	.000	-.067
					.159	.014	1.000	.459
Program type						-.274**	.000	.161
						.002	1.000	.070
Campus Location							-.035	-.012
							.695	.894
Study Schedule								.015
								.871

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed)

Table 3:Correlations Between Factors and Demographics

There was a negative correlation between program type, F2 (aspirational) and gender. In terms of selecting program type (primary Vs secondary), those candidates on the smaller campuses were more likely to be studying a primary degree and more likely to be female. In contrast, the main campus was more balanced between male and female candidates with the majority in the secondary program. This suggests that selection of specific teacher degrees is being influenced by location, job availability, and study opportunity. This has implications for the candidates' gender diversity and secondary teacher education in small regional campuses.

While ATSI candidates tended to study at the smaller campuses, the disparity in group size limited the reliability of findings. However, for campus location there was a positive correlation between age, gender, and ATSI and a negative correlation between location and program type. This finding reinforces the view that motivation for teaching was being influenced by location and opportunity. For ATSI and women in the smaller remote campuses there was an increase in the age of candidates. This has implications for program delivery and support in order to ensure retention of ATSI and older candidates in the degree. It also indicates that there are smaller number of males choosing teaching in regional campuses.

Relationships Between Variables

A series of One Way ANOVAS determined relationship between variables and F1 and F2. A significant difference between respondents age and F2 on test scores, $F(103, 2)= 277.82$, *MSE* $=0.003$, $p = .004$, $n^2 =1,000$. This indicated that the participants' age was significant in terms of type of career motivations. Other variable such as campus location and F1, $F(4, 119)=2.07$, MSE=1.65, p=.089, $n^2= 0.065$ and program type and F2, $F (1, 123)=6.32$, MSE=4.13, p=.013, $n^2= 0.05$, although not statistically significant, did show a considerable mean difference. Results indicated that pragmatic conditions in terms of '*where I study*' was influencing the participants' choice of career and choice of degree (primary or secondary). Gender and F2 also showed a considerable mean difference $F (1, 80.4)=6.32$, MSE=4.13, p=.013, $n^2= 0.05$ indicating different motivations for males and females. This has implications for how best to attract and support gender diversity in regional locations.

Results indicate that as the participants age increased aspirational motivations decreased, particularly for older students who were likely to endorse F2, selecting more pragmatic motivations for becoming a teacher. This does not necessarily indicate that older students were not aspirational but rather, their social/economic situations were influencing their career motivations.

Value Categories (Eccles et al., 1983)	(TQ, PP, PA Themes)						Motivational Factors (F1 & F2)			
	Teacher Qualities (TQ)	Frequency	*Professional practices (PP)*	Frequency	*Personal Attributes (PA)*	Frequency			N=	%
Interest	Experience & Passion	32	Knowledge & Expertise	48	Adaptive & Responsive	77	F2		157	42.8%
Utilities	Ethical Practices	31	Planning & Organisation	76	Reflective	20	F1		127	34%
Attainment	Commitment	6	Authentic Experience	14	Proactive	2	F2		22	6%
Cost	Vocation	38	Willingness & Capacity	13	Relational	9	F2		60	16%

F1 Pragmatic Motivations   F2 Aspirational Motivations
* *F1 Total 34%   F2 Total 66%*

Table 4: Alignment of Candidates' Values to Career Motivations

Alignment of Motivations and Values

For each of the value areas (TQ, PP, & PA) specific themes emerged (experience & passion, knowledge & expertise, adaptive & responsive …) and were aligned to appropriate value areas, *interes*t, *utilities*, *attainment* and *cost*. (see Table 4). Initial analysis considered the frequency of quantitative themes as a way of considering candidates' value priorities and to ascertain the interrelationships of motivations to either F1 or F2.

Overall, the most frequently mentioned value category was *interest value* (n=157), followed by *utility value* (n=127). Overall F2 was the most common motivation for becoming a teacher, even though F1 recorded the second highest frequency in participants' responses (see Table 4). *Cost* and *Attainment* (commitment, vocation) tended to be more aspirational in nature with the lowest frequency recorded for attainment. These findings reflect candidates' uncertainties at the beginning of their degrees on career choice and career pathway, with common motivations pointing to a general optimistic self-belief.

The use of data segments (see Appendix A, Table 5) illustrates the overall interrelationship of motivations. For the first belief area, *TQ,* a total of 16 common responses were identified and grouped under four themes (experience & passion, ethical practices, commitment & vocation). Priorities showed equal importance for *interest*, *utilities* and *cost* while *attainment* had the lowest priority. Aspirational motivation was the most common motivation including, " …dedicated , love of learning, passionate…". However, ethical practices, such as empathy, an important teaching quality, was frequently mentioned by the candidates, for example when commenting on why they wanted to become a teacher and why they believed they would be successful. Participants stated: "I am caring, organised and have a strong understanding…".

The second belief area *PP* involved a total of 13 common terms grouped under four themes (knowledge & expertise, planning & organisation, authentic experience and willingness & capacity). The most frequently mentioned value was planning and organisation (n=73). The priority was on *Utility* (usefulness). This included showing abilities in*, "...*organisation and planning and building rapport with students, regarded as important component of professional practice. This motivation tended to be pragmatic.

The third belief area PA had a total of 13 common terms (adaptive & responsive, reflective, proactive & relational…) grouped under four themes. The most frequently mentioned *PA* were adaptive and responsive (n=77). *Interest* held the highest priority value. Results suggests that candidates placed value and 'interest' in developing relationships, for example, "…my creativity gives me a unique edge in creating engaging and interesting classes…more flexible and adapting to student learning…*"*. Overall candidates' motivations for teaching were strongly aspirational (F2). They believed they had the necessary personal attributes to enable them to be successful.

Discussion

The research demonstrated a close relationship between candidates' values and career motivations. Through the use of the Eccles et al., (1983) value categories, it was evident that personal values helped to support persistence, performance, and ability beliefs (Martin & Dowson, 2009). These values are considered as critical for retaining quality teachers. However, the strength of that association varied depending upon the person's immediate needs (job security & location). Findings indicated that the areas of most value were firstly, 'interest' in teaching, and secondly, the 'utility' of career motivations. These values weighed heavily on career decisions and were influenced by the candidate's socioeconomic

background (Guarino et al., 2006; Beauchamp & Thomas, 2009; Thomas & Beauchamp, 2007), and whether they wanted to live and work locally (Kline & Walker-Gibbs, 2015; Lester, 2011).

The novel contribution of this study is its focus on regional teachers. This addresses a gap in our understanding of career motivations for different groups entering teacher education (Watt et al., 2014). These findings echo earlier studies that candidates selected teaching for two key motivations: aspirational (Watt & Richardson, 2004) and pragmatic (Bruinsma & Jansen, 2010; Moran et al., 2017; Richardson & Watt, 2006; 2010).

A key difference to earlier studies on teachers' career motivations in metropolitan areas is that 50% of the candidates in regional ITE programs had come directly from undergraduate study. This compares to 30% in Richardson and Watt's (2006) study. The direct intake candidates may have conflicting motivations, with teaching not always their first career choice. This creates tensions and can weaken the candidates' motivation for a teaching career. Low levels of motivation for a career can directly impact the level of commitment, perseverance and self-efficacy (Gagne & Deci, 2005). The conflicting motivations present a challenge for teacher education in how to best support regional candidates to remain in the profession.

One way to strengthen agency is in understanding the particular motivations of those candidates coming straight from undergraduate degrees. These candidates sought personal attainment in teaching, as described in this quote "…want to be a teacher who is respected and remembered by students, staff and parents", and the opportunity for social contribution (Gore et al., 2016; Moran et al., 2017). Bandura (1989) refers to this as career behaviour that is "regulated by forethought embodying cognized goals and influenced by self-appraisal of capabilities" (p. 1175). Belief in one's own capabilities was expressed as being able to make a positive difference, as noted by one participant, "I believe that education is vital to creating a well-functioning society and I bring these values to education"). These strongly held self-beliefs were often based on their own school and/or work experiences. For many candidates, teaching was an opportunity to foster close relationships with local communities and to follow personal passions and interests (Gagne & Deci, 2005).

Attracting, preparing and ensuring a career path for candidate teachers in regional locations is often challenging with candidates entering the profession with a continuum of conflicting motivations. However, motivation alone does not necessarily reveal an individual's psychological resilience or their ability to complete their studies or even their effectiveness as practitioners (Watt, Richardson, & Wilkins, 2014). This was certainly evident (anecdotal data in retention numbers/grades) with many regional candidates hampered by personal, financial and external conditions in completing their degrees and securing full time jobs.

Personal, financial and circumstantial factors had a significant indirect influence on career motivation and persistence (Beauchamp & Thomas, 2009; Thomas & Beauchamp, 2007; Watt et al., 2014). This was particularly the case with half of the candidates coming into teaching from blue collar careers. This group's motivations were shaped by personal interests, "I want to make a difference in my local area…", and also by their current circumstances, "…this is where I live and want to work in my local area". The candidates' desire to belong and stay connected to local communities (Gagne & Deci, 2005), was an important career motivation (Day et al., 2006; Flores & Day, 2006).

Even though aspirational motivations were identified as most important the overall strength of career motivation varied depending upon age, social/economic circumstances and location. For example, many of the candidates in the smaller remote regions had chosen to study a primary degree as they saw this as an opportunity for a satisfying professional career in the local community that would 'fit in' with their current family commitments.

One group that was particularly interested in contributing to local community was ATSI candidates. The ATSI teachers are regarded as important in teaching in regional locations in terms of raising ATSI student outcomes (Santoro, 2010). For this group, teaching was an opportunity of a socially worthwhile career (Arnold et al., 2005; Burton & Johnson, 2010; Gore et al., 2016; Santoro, 2010). This finding is significant as it highlights the important role that smaller regional universities play in supporting the individual careers of ATSI teachers in regional communities.

Regardless of their motivation for teaching, most candidates acknowledged the complexities of the teaching role, recognising the need for a balance of 'teacher qualities'. Overwhelmingly the value of being interested in teaching and children was key to their motivations as expressed by one participant, "…a passion and enthusiasm to bring out the best in all…". Intellectual fulfilment and enjoyment are common themes in motivational literature (Gore et al., 2016; Moran et al., 2017). Overall the candidates' motivations were fluid, existing along a continuum from aspirational to pragmatic, strongly influenced by social/economic circumstances. Teaching was an opportunity "to make a difference" in the lives of children or simply a chance of a satisfying job. Motivations were not always aligned with one motivational category as they often appeared interrelated and interconnected with candidates' current life situations. Although this is not only a regional phenomenon, it does have implications in terms of promoting teacher agency (Biesta, Priestley, & Robinson, 2015) and ensuring regional teachers have the knowledge and preparation needed to be successful teachers in regional schools. The 'right' motivations are crucial in terms of commitment, persistence and sense of self-efficacy in order to overcome personal and professional adversities as a regional teacher.

Limitations

A limitation of this study was that qualitative data was based on the responses from three open ended questions rather than from in-depth interviews. Given that the study utilises quantitative data from an 82% response rate the qualitative responses were useful in furthering the understanding of perceived values and motivation. Extending this study with in-depth interviews would confirm findings regarding the relationship between these particular values and career motivations.

Implications/Conclusions

A consideration of the research underpinning this study is the focus on how to attract, support and retain teacher diversity in regional schools (Handal, Watson, Petocz, & Maher, 2013; Jenkins & Cornish, 2015). The need for teacher quality in regional and remote locations has been well documented in the literature (Arnold et al., 2005; Kelly & Fogarty, 2015; Plunkett & Dyson, 2011;Smith et al., 2019). However, providing a career path for new teachers in regional areas is complex and challenging with issues such as: geographic isolation, difficulty in securing permanent jobs in favoured locations, difficulties in staffing in hard to staff schools, cultural differences faced by the urban trained teacher, high unemployment and low socioeconomic conditions. Not all regional locations have the same challenges or needs, but all regional schools do need committed, quality and diverse teachers who want to stay and work in local communities. As such, this study adds to the literature by focusing specifically on regional teachers' motivations.

To attract the 'best' candidates to teaching, to develop, support and keep them in regional schools, it is important to understand their values and motivations to choose teaching

as a career. Findings from this study illustrate the fluid nature of candidates' career motivations. There are specific implications for universities from this study in terms of support for undergraduate, post graduate, ATSI candidates and women aged between 25-45 years. Regional university campuses provide important opportunities for careers such as teaching for a wide diversity of candidates; especially women, career changers and ATSI. Teaching provides the opportunity of secure, socially meaningful work that contributes to local communities.

Key implications to retaining quality candidates in regional locations is recognising the motivations of the different groups entering teaching programs. Being aware of what candidates bring into teaching is important in shaping teacher education programs. Understanding the financial and socio-cultural challenges candidates face, particularly in hard to staff locations, is critical in supporting and ensuring candidate and beginning teachers develop optimistic self-efficacy (Bandura, 1989) and remain in regional areas. A vital aspect of developing teacher agency is ensuring candidates have a career path. This involves opportunity for permanent work, not just casual or temporary. This is vital not only for their professional growth, self-efficacy but also feeling of belonging and connectedness within regional communities (Ryan & Deci, 2000). The challenge for ITE is in ensuring that teacher preparation includes the required skills, capacities, knowledge and opportunity for career planning that aligns with career motivations.

Further research is needed on how to attract and support diverse teacher candidates for regional teaching. In order to verify data from this study further investigation with subsequent survey findings and follow-up interviews with specific groups of graduates is recommended. In particular, conducting in-depth research on graduates' values and motivations would provide useful comparisons to teacher candidates. The small numbers of ATSI provided a unique perspective within the whole data set. Future in-depth research with ATSI regional candidates would confirm and extend findings.

Teaching as a career can be both highly satisfying and meaningful, yet it is increasingly becoming a complex career path, particularly in regional locations where there is high unemployment and social disadvantage. If we are to attract the 'best' candidates in regional schools, develop, support and keep them, it is necessary to move beyond recognising the required values for teaching and start understanding the influence these values have on career choice, career pathways and retention.

References

Australian Government. (2017). *The Higher Education Reform Package*, Australian Government, Canberra, 1-35. Retrieved from https://docs.education.gov.au/system/files/doc/other/ed17-0138_-_he_-_glossy_budget_report_acc.pdf

Australian Curriculum, Assessment and Reporting Authority (ACARA).(2016). *National Assessment Program Literacy and Numeracy (NAPLAN):Achievement in Reading, Persuasive Writing, Language Conventions and Numeracy:* National Report for 2016, (ACARA) Sydney, NSW. Retrieved from https://www.nap.edu.au/docs/default-source/default-document-library/2016-naplan-national-report.pdf

Arnold, M.L., Newman, J.H., Gaddy, B.B., & Dean, C.B. (2005). A look at the condition of rural education research: Setting a direction for future research. *Journal of Research in Rural Education, 20*(6), 1-25.

Australian Institute for Teaching and School Leadership [AITSL]. (2015). *Action now: Selection of entrants into initial teacher education guidelines.* Victoria, Australia: Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/aitsl-selection-guidelines.pdf?sfvrsn=2

Australian Teacher Education Ministerial Advisory Group [TMAG], Craven, G., Beswick, K., Fleming, J., Fletcher, T., Green, M., . . . Rickards, F. (2014). *Action now: Classroom ready teachers* Teacher Education Ministerial Advisory Group.

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175-1184. https://doi.org/10.1037/0003-066X.44.9.1175

Bastick, T. (2000). Why teacher trainees choose the teaching profession: Comparing trainees in metropolitan and developing countries. *International Review of Education, 46*(3-4), 343-349. https://doi.org/10.1023/A:1004090415953

Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education, 39*(2), 175-189. https://doi.org/10.1080/03057640902902252

Biesta, G., Priestley, M., & Robinson, S. (2015).The role of beliefs in teacher agency. *Teachers and Teaching*, 21(6), 624-640. https://doi.org/10.1080/13540602.2015.1044325

Bowles, T., Hattie, J., Dinham, S., Scull, J., & Clinton, J. (2014). Proposing a comprehensive model for identifying teaching candidates. *The Australian Educational Researcher, 41*(4), 365-380. https://doi.org/10.1007/s13384-014-0146-z

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. https://doi.org/10.1080/02619760903512927

Burton, M., & Johnson, A. S. (2010). 'Where else would we teach?': Portraits of two teachers in the rural south. Journal of Teacher Education, 61(4), 376-386. https://doi.org/10.1177/0022487110372362

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Brotherhood of St Laurence [BoSL]. (March, 2018). *An unfair Australia? Mapping youth unemployment hotspots*. Fitzroy, Victoria, Australia: Brotherhood of St Laurence. doi:http://library.bsl.org.au/jspui/bitstream/1/10573/1/BSL_Unfair_Australia_Mapping_youth_unemployment_hotspots_Mar2018.pdf

Campbell, A. M., & Yates, G. C. (2011). Want to be a country teacher? No, I am too metrocentric. *Journal of Research in Rural Education, 26* (4), 1-12. Retrieved from http://sites.psu.edu/jrre/wp-content/uploads/sites/6347/2014/02/26-4.pdf

Centre for Research on Higher Educational Outcomes [CAEP]. (2014). *Council for the accreditation of education preparation, Annual Report.* NYU Steinhardt, School of Culture, Education and Human Development. Retrieved from: https://steinhardt.nyu.edu/scmsAdmin/media/users/CAEP_-_NYU_Inquiry_Brief_2014_April.pdf

Cohen, L., Manion, L., & Morrison, K. (2018). Factor analysis, cluster analysis and structural equation modelling. In L. Cohen, L. Manion, & K. Morrison. (8 Eds.), *Research methods in education* (pp. 818-838). London & New York: Routledge: Taylor & Francis Group. https://doi.org/10.4324/9781315456539-43

Chua, B. L., Liu, W. C., & Ying Chia, S. S. (2018). Teacher identity, Professional Practice, and Inquiry (PPI) in teacher education. *Asia Pacific Journal of Education*, 1-15. https://doi.org/10.1080/02188791.2018.1536602

Cidell, J. (2010). Content clouds as exploratory qualitative data analysis. *Royal Geographical Society, 42*(4), 514-523. https://doi.org/10.1111/j.1475-4762.2010.00952.x

Danielson, C., & McGreal, T. L. (2000). *Teacher evaluation to enhance professional practice*. USA: Library of Congress.

Davies, A. (2008). Declining youth in-migration in rural Western Australia: The role of perceptions of rural employment and lifestyle opportunities. *Geographical Research*, 46(2), 162-171. https://doi.org/10.1111/j.1745-5871.2008.00507.x

Day, C., & Hong, J. (2016). Influences on the capacities for emotional resilience of teachers in schools serving disadvantaged urban communities: Challenges of living on the edge. *Teaching and Teacher Education, 59,* 115-125. https://doi.org/10.1016/j.tate.2016.05.015

Day, C., Kington, A., Stobart, G., & Sammons, P. (2006). The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal, 32*(4), 601-616. https://doi.org/10.1080/01411920600775316

Downes, N., & Roberts, P.(2017). Revisiting the schoolhouse: A literature review on staffing rural, remote and isolated schools in Australia 2004-2016. *Australian and International Journal of Rural Education, 28*(1), 31-54. Retrieved from https://journal.spera.asn.au/index.php/AIJRE/article/view/112

Durksen, T. L., & Klassen, R. M.(2018). The development of a situational judgement test of personal attributes for quality teaching in rural and remote Australia. *The Australian Educational Researcher, 45(*2), 255-276. https://doi.org/10.1007/s13384-017-0248-5

Eccles, J. S. (2009).Who am I and what am I going to do with my life? Personal and collective identities as motivators of action. *Educational Psychologist, 44*(2), 78-89. https://doi.org/10.1080/00461520902832368

Eccles, P. J., Adler, T.F., Futterman, R., Goff, S.B., Kaczala, C.M., & Meece, J.L., Midgley, C. (1983). *Expectancies, values, and academic behaviour. Achievement and achievement motivation* (pp. 75-146). San Francisco, CA: W.H.Freeman.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53*(1), 109-132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Fives, H., & Buehl, M. M.(2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? which have been examined? what can they tell us. *APA Educational Psychology Handbook, 2*, 471-499. https://doi.org/10.1037/13274-019

Flores, M.A., Day, C. (2006). Context which shape and reshape new teacher identity: A multi-perspective study. *Teaching and Teacher Education, 22* (2), 219-232. https://doi.org/10.1016/j.tate.2005.09.002

Gabriel, M. (2002). Australia's regional youth exodus. *Journal of Rural Studies,18*(2), 209-212. https://doi.org/10.1016/S0743-0167(01)00039-0

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, *26*(4), 331-362. Retrieved from https://doi.org/10.1002/job.322

Gore, J., Barron, R.J., Holmes, K., Smith, M. (2016). Who says we are not attracting the best and brightest? Teacher selection and the aspirations of Australian school students, *Australian Educational Researcher, 43*(5), 527-549. https://doi.org/10.1007/s13384-016-0221-8

Green, B., & Reid, J. (2004). Teacher education for rural–regional sustainability: Changing agendas, challenging futures, chasing chimeras? *Asia-Pacific Journal of Teacher Education, 32*(3), 255-273. https://doi.org/10.1080/1359866042000295415

Guarino, C.M., Santibanez, L., & Daley, G.A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research, 76*(2), 173-208. https://doi.org/10.3102/00346543076002173

Handal, B., Watson, K., Petocz, P., & Maher, M. (2013). Retaining mathematics and science teachers in rural and remote schools. *Australian and International Journal of Rural Education*, *23*(3),13-27.

Hesse-Biber, S. N., & Leavy, P. (2010). *The practice of qualitative research*. (2nd Eds.), Los Angeles, US: Sage Publications, Inc.

Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education, 26*(8), 1530-1543. https://doi.org/10.1016/j.tate.2010.06.003

Howes, L. M., & Goodman-Delahunty, J. (2015). Teachers' career decisions: Perspectives on choosing teaching careers, and on staying or leaving. *Issues in Educational Research*, *25*(1), 18.Retrieved from https://search.informit.com.au/documentSummary;dn=373278443631252;res=IELAPA

Jenkins, K., & Cornish, L. (2015). Preparing pre-service teachers for rural appointments. *Australian and International Journal of Rural Education*, *25*(2),14-27.

Kelly, N., & Fogarty, R. (2015). An integrated approach to attracting and retaining teachers in rural and remote parts of Australia. *Journal of Economic & Social Policy, 17*(2), 1-17. http://epubs.scu.edu.au/jesp/vol17/iss2/1

Kline, J., & Walker-Gibbs, B. (2015). Graduate teacher preparation for rural schools in Victoria and Queensland. *Australian Journal of Teacher Education (Online), 40*(3), 68-88. https://doi.org/10.14221/ajte.2014v40n3.5

Koziol, M. (15 November, 2018). Tehan blasts unis for 'neglecting' regional students. *The Sydney Moring Hearld [SMH].* Retrieved from https://www.smh.com.au/politics/federal/beggars-belief-dan-tehan-accuses-city-vice-chancellors-of-neglecting-regional-research-20181114-p50fyj.html

Kutsyuruba, B., & Treguna, L. (2017). Curbing early-career teacher attrition: A pan-Canadian document analysis of teacher induction and mentorship programs. *Canadian Journal of Educational Administration and Policy, 161,*1-42.

Kyriacou, C., Coulthard, M. (2017). Undergraduates' views of teaching as a career choice. *Journal of Education for Teaching, 26*(2),117-126. https://doi.org/10.1080/02607470050127036

Lent, R. W., & Brown, S. D. (2006). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment, 14*(1),12-35. https://doi.org/10.1177/1069072705281364

Lester, N. C. (2011). Relationship building: Understanding the extent and value. *Education in Rural Australia*, *21*(1), 79-93.

Livingston, K. (2018). Multiple influences on teachers in changing environments, *European Journal of Teacher Education, 41*(2),135-137. https://doi.org/10.1080/02619768.2018.1432318

Low, E. L., Hui, C., & Cai, L. (2017). Developing student teachers' critical thinking and professional values: a case study of a teacher educator in Singapore. *Asia Pacific Journal of Education, 37*(4), 535-551. https://doi.org/10.1080/02188791.2017.1386093

Lyons, T., Joon-Yul, C., & McPhan, G. (2009). Innovation for equity in rural education. Proceedings of the *International Symposium for Innovation in Rural Education* (ISFIRE) (pp.1-263). SiMERR National Centre, UNE, Armidale, NSW, Australia.

Lyons, T. (2009). *Teachers' motivations for working in rural schools*. Paper presented at the Improving Equity in Rural Education: Proceedings of the International Symposium for Innovation in Rural Education (ISFIRE) (pp.167-177).

Lyons, T., Cooksey, R., Panizzon, D., Parnell, A., & Pegg, J. (2006). *Science, ICT and mathematics education in rural and regional Australia: The SiMERR national survey.* University of New England, National Centre of Science, ICT and Mathematics for Rural and Regional Australia. http://apo.org.au/node/2732

Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research,79*(1), 327-365. https://doi.org/10.3102/0034654308325583

Mayer, D., Allard, A., Bates, R., Doecke, B., Kline, J., & Kostogriz, A…. (2012). Studying the effectiveness of teacher education, *Curriculum Leadership, 10*(7), 3-212. doi:http://www.setearc.com.au/wp-content/uploads/2013/08/SETE_report_FINAL_30.11.152.pdf

Moran, A., Kilpatrick, R., Abbott, L., Dallat, J., & Mc Lune, B. (2017). Training to teach: Motivating factors and implications or recruitment. *Evaluation and Research in Education, 15*(1), 17-32. https://doi.org/10.1080/09500790108666980

Ng, W., Nicholas, H., & Williams, A. (2010). School experience influences on pre-service teachers' evolving beliefs about effective teaching. *Teaching and Teacher Education, 26*(2), 278-289. https://doi.org/10.1016/j.tate.2009.03.010

NSW Council of Deans of Education [NSWCDE]. (2017, January). *Assessing and confirming suitability for teaching: A selection framework for NSW teacher education providers* [Brief Report]. Sydney, NSW.

Plunkett, M.& Dyson, M. (2011). Becoming a teacher and staying one: Examining the complex ecologies associated with educating and retaining new teachers in rural Australia? *Australian Journal of Teacher Education, 36*(1), 32-44. https://doi.org/10.14221/ajte.2011v36n1.3

Reid, J., Green, B., Cooper, M., Hastings, W., Lock, G., & White, S. (2010). Regenerating rural social space? teacher education for rural—Regional sustainability. *Australian Journal of Education, 54*(3), 262-276. https://doi.org/10.1177/000494411005400304

Regional Australian Institute [RAI] (n.d.). *What is Regional Australia?* Retrieved from (http://www.regionalaustralia.org.au/home/what-is-regional-australia/2019) Richardson, P. W., & Watt, H, M.G. (2010). Current and future directions in teacher motivation research, *the decade ahead volumn16 part B*. In Timothy C. Urdan, Stuart A. Karabenick (Ed.), *Applications and contexts of motivation and achievement (advances in motivation and achievement* (pp. 139-173), UK: Emerald Group Publishing Limited. https://doi.org/10.1108/S0749-7423(2010)000016B008

Richardson, P. W., & Watt, H. M. (2006). Who chooses teaching and why? profiling characteristics and motivations across three Australian Universities. *Asia-Pacific Journal of Teacher Education, 34*(1), 27-56. https://doi.org/10.1080/13598660500480290

Roberts, P. (2004). *Staffing an empty schoolhouse: Attracting and retaining teachers in rural, remote and isolated communities.* Report published by the NSW Teachers Federation (pp.4-257). Retrieved from https://files.eric.ed.gov/fulltext/ED507343.pdf

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78. https://doi.org/10.1037/0003-066X.55.1.68

Sanger, M., & Osguthorpe, R.D. (2011). Teacher education, preservice teacher beliefs, and the moral work of teaching, *Teaching and Teacher Education, 27*(3), 569-578. https://doi.org/10.1016/j.tate.2010.10.011

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. https://doi.org/10.1080/09540250903289915

Savage, G. C. (2016). Who's steering the ship? National curriculum reform and the re-shaping of Australian federalism. *Journal of Education Policy, 31*(6), 833-850. https://doi.org/10.1080/02680939.2016.1202452

Sheridan, L., & Tindall-ford, S. K. (2018). "Fitting into the Teaching Profession": Supervising Teachers' Judgements During the Practicum. *Australian Journal of Teacher Education, 43*(8),46-64. https://doi.org/10.14221/ajte.2018v43n8.4

Smith, C., Parr, N., & Muhidin, S. (2019). Mapping schools' NAPLAN results: A spatial inequality of school outcomes in Australia. *Geographical Research*, 57(2), 133-150. https://doi.org/10.1111/1745-5871.12317

Stronge, J. H., Ward, T. J., & Grant, L. W. (2011). What makes good teachers good? A cross-case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education, 62*(4), 339-355. https://doi.org/10.1177/0022487111404241

Sunley, R., & Locke, R. (2010). Exploring UK secondary teachers' professional values: An overview of the literature since 2000. *Educational Research, 52*(4), 409-425. https://doi.org/10.1080/00131881.2010.524751

Sinclair, C., Dowson, M., & Thistleton-Martin, J. (2006). Motivations and profiles of cooperating teachers: Who volunteers and why? *Teaching and Teacher Education, 22,* 263-279. https://doi.org/10.1016/j.tate.2005.11.008

Thomas, L., & Beauchamp, C. (2007). Learning to live well as teachers in a changing world: Insights into developing a professional identity in teacher education. *The Journal of Educational Thought (JET) / Revue De La Pensée Éducative, 41*(3), 229-243.Retrieved from http://www.jstor.org/stable/23765520

Watt, H. M. G., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the FIT-choice scale. *Journal of Experimental Education, 75*(3), 167-202. https://doi.org/10.3200/JEXE.75.3.167-202

Watt, H. M., & 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. https://doi.org/10.1080/1359866X.2012.700049

Watt, H. M. G., Richardson, P. W., & Wilkins, K. (2014). Profiles of professional engagement and career development aspiration among USA preservice teachers. *International Journal of Educational Research,65*, 23-40. https://doi.org/10.1016/j.ijer.2013.09.008

White, S., & Reid, J. (2008). Placing teachers? sustaining rural schooling through place-consciousness in teacher education. *Journal of Research in Rural Education, 23*(7), 1-11.

Wigfield, A., & Eccles, J.S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25*, 68-81. https://doi.org/10.1006/ceps.1999.1015

Acknowledgements

Appendix A

Value Categories	Candidates Values					
	Teaching Qualities	Data segment	*Professional practices*	Data segment	*Personal Attributes*	Data segment
Interest	Experience and Passion	"…a personal approach that lends itself to facilitating a quality education environment" (#108 M)	Knowledge & Expertise	" I believe that I have developed an in-depth knowledge of music from year of study and I hope that this knowledge will aim me in becoming a good classroom teacher." (#62 M)	Adaptive & Responsive	" my creativity gives me a unique edge in creating engaging and interesting classes…more flexible and adapting to student learning…my perseverance…my enthusiasm for teaching …" (#39 M)
Utilities	Ethical Practices	" I am caring organised and have a strong understanding of subject area" (#74 F)	Planning & Organisation	"…organisation and planning, building rapport with students, a thorough understanding of subject area." (#92 F)	Reflective	" … my personal attributes such as reflecting on teaching experiences and being able to act on and listen to feedback will help to contribute to my success". (#45 F)
Attainment	Commitment	" …creativity, integrity ..commitment are my core qualities. I am really dedicated to teaching children how to learn ...encourage a love of learning. I believe that education is vital to creating a well-functioning society and I bring these values to education." (#92 F)	Authentic Experience	"…real world experiences. For want of a better word, being 'worldly'. Furthermore, being knowledgeable about my subject area, far beyond know the syllabus. Being passionate about my subject also helps." (#115 M)	Proactive	" …I 'walk the talk' and I am proactive and well as extending myself to help student and other teachers".(#18 M)
Cost	Vocation	" …dedicated , love of learning, passionate about subject area, caring, approachable, kind, taking an interest in student welfare". (#68 M)	Willingness & Capacity	" …a strong commitment to excellence. The willingness and the capacity to go the extra mile. A passion and enthusiasm to bring out the best in all." (#17M)	Relational	"Self-awareness and ability to critically reflect, seek out and take on board feedback, good interpersonal communication and demonstrated capacity to build strong working relationships ... I have high expectations, consider myself to be hard working and will always push myself in pursuit of excellence". (#15F)

Table 5:Teacher Candidates Values (Eccles et al., 1983)