Melbourne Graduate School of Education





MGSE INDUSTRY REPORT #5

CAREER - CHANGERS

Keeping career-change teachers in the profession

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Dr Babak Dadvand is a senior lecturer at the School of Education, La Trobe University. Babak's research is in areas of teaching and teacher education with a focus on issues of equity, diversity and inclusion in relation to teachers' work and student experiences. As a teacher educator, Babak has worked with multiple cohorts of pre-service teachers, including those who enter the teaching profession through employment based pathways into teaching.

Babak's current body of research is focused on the challenges that preservice and in-service teachers face and the types of support that they need in their transitions into the profession, especially within the more challenging working conditions of schools that serve communities that are socially-historically marginalised. This Industry Report is informed by and builds upon Babak's recent research and teaching work.



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Executive summary

Career-change teachers are increasingly viewed by governments around the world as part of a solution to complex problems relating to teacher shortages, especially in schools serving socio-economically marginalised communities. But what do we know about career-change teachers? What brings them to the profession? What can we do to ensure they experience a fulfilling transition and have long-term success in their new careers?

Between 2019 and 2021, the Australian Federal Government and the Victorian state Government made significant financial investments to recruit career-change individuals to secondary schools facing teacher shortages. This included funding for alternative initial teacher education pathways that combine paid professional practice in a school with tertiary study to achieve a post-graduate teaching qualification.

Despite these investments, critical questions about teacher retention have not been sufficiently addressed. Increasing recruitment through special entry pathways and incentives without a sustained retention strategy will lead to greater teacher shortages due to the revolving door of teacher recruitment and teacher attrition.

This report presents a review of international research alongside the findings from an Australian study involving 17 career-change teachers currently in the process of obtaining teacher qualifications in the state of Victoria. The focus is on the supports that initial teacher education programs and school communities can provide to career-change teachers to ensure their successful transition to study and teaching, and their long-term retention within their schools and the profession more broadly.

Our findings highlight the significance of close university-school partnerships in supporting

career-change teachers during their transition into the profession. Initial teacher education programs need to provide a range of tailored supports to career-change teachers. This includes providing university-based mentors who are familiar with career-change teachers' personal-professional needs and expectations, and adjustments to study requirements during placement and professional practice. Importantly, they need to assist to create communities of practice among previous and/or current cohorts of early career teachers to share experiences and offer peer support.

It is also crucial that schools who host career-change teachers during their professional practice (placement in schools) and beyond, provide tailored forms of social-professional support. School-based teacher mentors who assist in the transfer of knowledge and skills relating to curriculum, pedagogy and classroom management are essential. The social-professional networks of support that facilitate the transition of career-change teachers in the organisational cultures of schools are also key.

It is also imperative that school leaders play a role in helping to integrate new teachers into the collegial context of schools and that they provide necessary adjustments to work in the early years of their new careers, which are crucial for the career-change teachers' long-term sustainability within the profession.

Key messages



Career-change teachers, namely those who have transitioned or are currently transitioning from other professions or fields into teaching, constitute about a third of the teaching workforce internationally.



Career-change teachers can make significant contributions to the teaching of young people through their real-world experiences from the labour market and their up-to-date knowledge, which can help make learning more engaging for students.



A long-term strategy is needed to attract and retain the most qualified and passionate careerchange individuals into the teaching profession.



Part of this strategy entails providing pathways into teaching that offer flexibility to pursue study while working towards full teacher accreditation.

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Alternative pathways into teaching, however, should not be viewed as easy fixes for complex, structural problems relating to teacher shortages, especially in socioeconomically disadvantaged schools that face high rates of teacher turnover.



Teacher shortage problems are likely to persist if education systems fail to address systemic issues relating to relatively low pay, insecure employment, heavy workloads, inadequate ongoing support and ever-increasing administrative requirements and bureaucratic duties in teaching.



The fast growth and diversity of alternative pathways into teaching has made the need for research on these programs ever more urgent with the aim to identify effective curriculum, pedagogical, and professional practices within such programs.

Recommendations



To ensure that career-change teachers remain in the profession, universities must support them through their initial teacher education. Specific support of career-change teachers must be continued by school administration through induction, transition and adjustment to teaching.



Funding is required to research the motivation, transition and retention of career-change teachers; this is critical for the success of investment made to recruit, train and induct career-changers into the teaching profession.



Teacher education providers must develop support strategies, which include evaluation, and consider the needs of career-change teachers, recognising and working with the professional motivations and expectations of career-change teachers, while capitalising on the knowledge and skill sets that they bring with them to the teaching profession from their previous careers.



Teacher education providers should contribute to the successful transition of career-change individuals by offering adjustment to study requirements, providing support through experienced university-based mentors, and assisting in establishing more realistic expectations about the requirements of teaching practice.



Effective partnerships between university programs and schools are needed to help career-change teachers apply knowledge and skills acquired during their studies to their day-to-day practices in classrooms. Designated support personnel are required for career-change teachers.



Schools need to provide schoolbased teacher mentors who can provide pedagogical advice and develop the social-professional networks of career-change teachers. This support is crucial and helps career-change teachers navigate the challenges that arise during early years of teaching. The benefits of providing support at the start of the teaching journey far outweigh the costs.



School leaders and principals are integral to the successful transition and long-term retention of career-change teachers. They need to provide work adjustments and professional development opportunities.

Introduction

Teacher shortages remain a serious challenge for many education systems around the world. High teacher attrition, especially among early career teachers, significantly contributes to teacher shortages. In Australia, estimates vary that between 30 per cent and 50 per cent of teachers leave the profession in the first five years of their career. [1]

To address teacher shortage problems, the Australian Federal Government (2019) and the Victorian State Government (2020) made significant financial investments to recruit career-changers to schools facing teacher shortages. They did this by providing funding to support alternative initial teacher education pathways that combine paid professional practice in a school, and tertiary study to achieve a post-graduate teaching qualification.

Despite these investments, critical questions about the retention of career-change teachers remain. Without implementing a sustained retention strategy, increasing recruitment through special entry pathways will just lead to greater teacher shortages given the current revolving door of teacher recruitment and teacher attrition.

A combination of altruistic, personal and labour market factors affects an individual's decision to make a career-change to teaching. Altruistic factors include a strong sense of 'calling for service' [2], commitment to care for others [3], and making a difference in the lives of children and young people. Personal factors often relate

to issues such as work/life balance. Economic factors reflect employment conditions in the wider labour market which can affect individuals' career decisions because of the relative security of teaching during economic downturn. [4-7]

While research has examined the reasons behind the career-change decision of individuals to teaching, we are yet to develop a better understanding about what specific support career-change teachers need during their teacher preparation, school placement and induction in order to remain in the profession.

There is a shortage of research on the experiences of career-change teachers in transitioning to study and to teaching in the Australian context. [8] This report presents a review of international research as well as the findings from an Australian study about the support that initial teacher education courses and school communities can provide to career-change teachers to ensure their successful transition to study and teaching.





High teacher turnover and teacher shortage

Teacher shortages happen when inadequate numbers of qualified individuals are willing to join and/or stay in the teaching profession. That is, a teacher shortage emerges "when there is an imbalance between the number of teachers demanded and the number of qualified teachers willing to offer their services to fill these demanded positions". [9]

Multiple factors contribute to teacher shortages including policies such as teacher selection systems and school funding. External factors such as the conditions within the wider labour market can also affect teacher supply, with a reduction in overall unemployment rates often leading to an increase in teacher shortage. [7]

Our understanding of teacher shortage, of its scale and severity in Australia, is hampered by the absence of national data. This is partly due to the Australian system of education administration in which different states and jurisdictions are responsible for their teaching workforce planning. Data limitations have led to speculations of the size and severity of teacher shortage problems in Australia, with media and research articles estimating teacher attrition within the first five years to be between 30 per cent and 50 per cent. ^[1]

In the absence of nationally consistent teacher shortage data, teacher turnover can be used as a proxy for a better understanding of teacher attrition, that is, the rates at which teachers leave the profession prematurely for reasons other than retirement. Teacher turnover denotes "the rate at which teachers leave a school, whether to teach elsewhere (movers) or to leave the profession entirely (leavers)". [9]

Research on teacher turnover would not only help identify why teachers move or leave, but how they can be supported to remain in the profession more broadly and within the schools that need them most more specifically.

Analysis of data from the Australian Graduate Survey and the Graduate Outcomes Survey, administered to graduates about four months after graduation, show that in 2019, 20 per cent of early career teachers indicated that they would leave the profession within one to five years, and a further 9 per cent indicated that they would leave teaching within six years or more, while 26 per cent remained 'unsure' about their future intentions. ^[10] This means over half of graduates (55 per cent) either indicated an intention to leave or were not certain about staying.

Additionally, the OECD Teaching and Learning International Survey (TALIS) results show that 25 per cent per cent of Australian teachers would like to change to another school if that was possible. This is higher than the OECD average of 20 per cent. [11]

High teacher turnover and subsequent teacher shortages are not unique to Australia. Many countries grapple with high rates of their early career teachers leaving the profession. Attrition figures among new teacher graduates are 28 per cent in the UK, 60 per cent in Canada, and range between 40 per cent and 50 per cent in the US. [1]

There are also significant teacher shortages due to high attrition rates in countries within the European Union, especially in learning areas relating to Science, Technology, Engineering and Mathematics. ^[12]

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Qualified teachers remain an inequitably distributed resource globally.[13] The burden of teacher shortage is born disproportionately by the most disadvantaged schools. In Australia, these are the schools that serve culturally and linguistically diverse learners, Aboriginal and Torres Strait Islander students, or schools in communities outside the metropolitan areas and within regional and rural Australia.

Teachers in the most disadvantaged and high-need Australian schools tend to be less experienced and more likely to teach out of field compared to teachers in more advantaged schools. Australia also has fewer teachers in its most disadvantaged schools. [14]



Solutions to teacher shortage problems

A number of different policies, programs and incentives have been introduced to address the problem of teacher shortage. This includes measures such as subsidised housing, financial allowances and relocation support. For instance, the Victorian Department of Education and Training has recently allocated \$41.7 million funding to attract qualified teachers to government schools in socio-economically disadvantaged, remote and/or hard-to-staff secondary schools. [15]

Alternative pathways into teaching are among other levers used to address the shortage of a qualified teaching workforce. In recent years, there has been significant growth in the number and types of alternative programs offered by universities around the world. ^[16] These programs differ from traditional teacher certification programs in that they allow a fast-tracked entry into teaching, one that typically combines studying, a salary upon admission into the program, and learning intensively 'on-the-job'.

These alternative pathways are designed to attract high-achieving graduates from fields outside Education or individuals with professional experience who are less likely to undertake a standard teacher preparation program, which requires long periods of study without salary to become a qualified teacher.

In Australia, alternative pathways into teaching have seen a significant growth and funding boost in recent years. In October 2019, the Victorian Government announced the biggest ever investment (\$244.6 million package) to improve teaching quality. ^[17] The initiative, which was launched by the Victorian Minister for Education, offers a range of incentives to attract/retain teachers and fill hard-to-staff positions including \$5.6 million for alternative pathways into teaching to attract the best and brightest graduates and those with career experience to 'learn-on-the-job' as a teacher, while simultaneously studying for postgraduate teaching qualifications.

The Victorian initiative has been matched at the Federal level. The Federal Government has made a \$21 million investment to strengthen alternative pathways into teaching. $^{[18]}$

The Federal Government funding supports the High-Achieving Teachers Program (2020–2022). This program aims to recruit high-achieving graduates and those with work experience to Australian secondary schools facing teacher shortages in the Northern Territory, Western Australia, Victoria and Tasmania. The program participants complete an Australian accredited teaching qualification and receive mentoring support while being paid to learn on the job at disadvantaged schools facing teacher shortages.

Responding to the funding support provided by the Victorian and Federal Governments, various accredited alternative programs are now at work to prepare and place teachers in schools that deal with teacher shortage problems.

In the state of Victoria, there are three accredited alternative pathways into teaching. These include the Teach For Australia program which has partnered with the Australian Catholic University (ACU), the La Trobe University's NEXUS program, and the Melbourne Graduate School Education's (MGSE) Master of Teaching (Secondary) Internship program.

Despite differences in the structure and objectives of these programs, the common thread that binds them is a focus on attracting capable and passionate individuals to teaching, who have work experiences from other sectors. This report, focuses on those career-change individuals who enter teaching via accredited, often fast-tracked, pathways into teaching.





The Victorian Department of Education and Training has recently allocated **\$41.7 million** funding to attract qualified teachers to government schools in socio-economically disadvantaged, remote and/or hard-to-staff secondary schools.

*Engaging with the voices and views of career-change teachers

In this report, we engage with views of 17 career-change teachers enrolled in the Melbourne Graduate School of Education (MGSE) Master of Teaching Secondary (MTSI) program. We conducted interviews with these teachers in August and September 2021. Our focus was to develop a better understanding about the challenges career-change teachers face and the supports they find helpful in their transition to study and teaching.

The average age of the participants was 38 with five between 24-29, five between 30-39, four between 40-49 and three between 50-59 years of age. The career-change teachers came from diverse professional backgrounds from NGOs, financial and corporate sector, arts, architecture and design as well as academia.

We interviewed these individuals (20-35 minutes each) inquiring about a ranging of issues including the effectiveness of the school and university supports, the balance between teaching and study requirements, challenges during study and teaching, and intentions about leaving the teaching profession in the future.

03

Career-change teachers

Who are they?

Terms such as career-change teachers and second-career teachers are often used to explain people who become teachers after spending time in other professions. [16] In this report, we use the term 'career-change teachers' to refer to this particular cohort of the teaching workforce, namely those who have transitioned or are currently transitioning into teaching from other professions or fields.

Using the term 'career-change teachers' helps us acknowledge the varied and diverse career histories of individuals, which can range from minimal experience in another profession to experience within a number of previous careers or within a single previous profession for a considerable amount of time. [19]

Career-change teachers are often older and are increasingly viewed by governments around the world as a solution to the problem of teacher shortage. ^[20] Internationally, about a third of new graduates of teaching programs are career-changer teachers. ^[21]

Career-change teachers and the pandemic

The way the COVID-19 pandemic has affected the teaching workforce requires further examination in order to truly understand the consequences. Unemployment caused by the pandemic is likely to attract more careerchangers to teaching in years to come. [22] This is due to the relative (perceived) stability of teaching at times of economic downturn. [6]

I spent a lot of time last year thinking about teaching when I saw the Melbourne Uni program. That was sort of the push to doing this program because I just couldn't bear the thought of going back to uni and being around undergraduates and, you know, having to work weekends and all that fun stuff. The idea of going straight into the workplace and not necessarily being immediately great, but at least being a little bit useful, was what sort of got me over the line.

As unemployment rates rise within the wider labour market, more people are likely to consider a change of career to teaching. Conversely, improvements in employment conditions are likely to make teaching a less attractive career option as candidates might be attracted to other careers with higher pay rates. ^[4]

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In addition to the teacher supply side of the equation, the pandemic has further highlighted the position of the teaching profession as 'a-front-line' service.

The challenge of home schooling during school closures has made the value of the teaching profession ever more visible to policy makers, politicians, parents and the wider public.

Yet, the impacts of the pandemic on the teaching workforce are more complex than have so far been acknowledged.

The intensification of the workload for many teachers during school closures and the transition to online teaching has acted as a catalyst for some already in the profession to consider alternative careers. [23]

What do we know about career-change teachers?

Career-change teachers can make significant contributions to the education of young people, to quality teaching and to the teaching profession more broadly. Despite these contributions, much of the research on teacher education has traditionally focused on those who enter teaching as a first career and often via standard teacher preparation pathways. This has left career-change teachers severely under-researched.

Existing, but limited, studies point to cohort-specific characteristics that distinguish career-change teachers from those who choose teaching as their first occupation. These characteristics include, among others, career motivations, knowledge and skill sets accrued through previous employment, professional beliefs and expectations, as well as professional needs and personal circumstances.

Factors for career-change to teaching



Intrinsic motivation



A sense of care and commitment to the common good



A desire to making a difference in the lives of children and young people



Extrinsic motivation



Labour market related factors and employment rates



Special entry pathways into teaching, recruitment bonuses and other incentives



Considerations about work/life balance and employment security

Career motivations

Career-change teachers tend to be older and turn to teaching at a later stage in their lives. Both intrinsic and extrinsic factors interact to influence the professional motivation of career-change teachers.

One key intrinsic career motivation, well documented in research, is a sense of care and commitment. Teaching has been traditionally considered a caring profession. [24] It is driven by 'a sense of calling for service'. [2] For many, a desire to contribute to the common good is one of the main reasons behind the career decision to become teachers.

I was doing chartered accounting and then banking for about the last 12 years. That was my sort of pathway for bit and I was increasingly finding it not very fulfilling. I was very busy and stressed and all those sort of things, but not feeling like I was actually contributing to a community and people as much as I wanted to.



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I'd often toyed with the option of becoming a teacher, for years, so I finished my undergraduate course in 2002 and I always sort of felt like I could go back and do a Dip Ed and maybe I could be a teacher. I always felt really comfortable in school environments. I enjoyed the sense of community, I like working with young people, I like feeling like I'm making some sort of – you know, helping them in some ways, and so last year when things changed, the world changed, I was given some time and space to think about what I was doing with my life, where I wanted to go, and teaching was one of the things that I thought I would really like to do, and my partner was very encouraging and so here I am.

These motivations are altruistic in nature ^[26] and can be traced back to individuals' previous experiences in other professions or in their personal lives more generally, which manifest as a sense of mission and desire to serve society.

Intrinsic motivations explain why, despite the well-recognised challenges associated with relatively low pay, heavy workload and ever-increasing bureaucratic demands and administrative duties that mark the teaching profession today, many still make the career-change to teaching. They also help explain why many career-change teachers opt to work in the schools that serve historically marginalised and socio-economically disadvantaged communities.

In addition to intrinsic reasons, extrinsic factors also play a part in the career decisions of individuals. For career-change teachers, these relate to issues such as labour market dynamics, perceptions about teaching as a secure career, and family-work balance.

The impacts of extrinsic factors on individuals' career-change decisions become more pronounced during times of economic downturn and recession. As the prospect of secure employment diminishes and unemployment rates increase at economically uncertain times, more people are likely to consider teaching as an alternative career option.

I got made redundant, which was the catalyst for a career-change from my previous role. I could have probably quite easily gone and gotten a job in my same career somewhere else, but I just decided to use it as an opportunity to make a more significant change. One of the reasons that I wanted to go into teaching was because I wanted to work in a field that was more connected to the community rather than in a corporate environment.

Labour market related factors interact with other extrinsic factors to influence career options available to individuals. Other extrinsic factors that might affect the career-change decisions of individuals towards teaching include: wider employment conditions in the labour market, changes in demographics, recruitment bonuses and incentives, education policies and school-related requirements, for instance in terms of class sizes, and teachers' duties. [4] The perceived security of the teaching profession and issues about work/life balance are among other extrinsic motivation factors.

While extrinsic factors play a part in the career-change decisions of individuals, research shows that these are often not the main, and only, reasons for career-change teachers. [26] Intrinsic factors tend to play a more salient role in career-change decisions of individuals towards teaching. In the absence of conclusive research and solid evidence as to the interplay of factors, more research is needed to provide a better understanding of how intrinsic and extrinsic factors interact in career-change decisions of individuals, and in their decision to remain or leave the profession.

Knowledge and skill sets

Career-change teachers can contribute to quality teaching. They bring broader work/life skills and competencies and desirable qualities such as strong work ethics, autonomy and 'real world' experiences. [27]

Career-change teachers possess up-to-date content knowledge and labour market skills that can make learning more engaging and meaningful for students. [3, 21] Compared to those who choose teaching as their first occupation, career-change teachers carry a repertoire of problem-solving, coping and management strategies from their previous employment. [28]

I was a researcher. I did that for more than five years. I always did some teaching at the side. I did some tutoring, and teaching (was) always one of my passions. I never pursued it as a main career, but I want to pursue it now just because I like my subject and have a daughter (a) similar age to the group I'm teaching, so I was helping her, and at the same time, I want to develop this as a career for myself and yet just keep doing this and be good at teaching and know whether the kids know and help them to be better at math.

Given their professional experiences, career-change teachers are also believed to be 'application-oriented' with expertise in putting to use abstract knowledge and competencies to address problems that have real-world implications. [29]

On an interpersonal level, career-change teachers possess teamwork and organisational skills. ^[28] These skill sets, if harnessed in effective ways, can be of particular value to working within the institutional context of schools, and in fostering a culture of cooperation within teaching teams and in interaction with the school leadership groups.





Professional beliefs and expectations

Many of the competencies and skills that career-change teachers have accrued from previous employment and their experiences in the labour market are transferrable to their day-to-day work in schools and classrooms. However, this transfer of skills and competencies may become problematic if there is a mismatch between their expectations and the requirements of schools. [30]

For instance, career-change teachers may have traditional views about learning. Their perceptions about what constitutes effective teaching may reflect traditional views based on transmission of knowledge. ^[29] This can overshadow the importance of collaborative and dialogic modes of learning, and the significance of building positive student-teacher relationships as part of the learning endeavour.

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Strong and up-to-date content knowledge per se is not sufficient for effective classroom teaching. A long tradition of research in teaching and teacher education shows that teachers need pedagogical skills to present content knowledge in an effective way to their students.[31] These pedagogical skills are what distinguishes teachers who possess both knowledge of the content and effective pedagogies from subject matter experts.

Professional needs and personal circumstances

In transitioning to study and teaching, career-change teachers may need to re-position themselves as learners and re-calibrate their professional relationships with colleagues in schools. For some, this might lead to a sense of frustration as they may be looked upon as novices despite their wealth of professional experience. [8]

Compared to those who become teachers earlier, career-change teachers have unique needs due to personal circumstances. Many career-change teachers have financial responsibilities for family or care for children or elderly parents. [27, 32]

Meeting the competing, and at times conflicting, personal, financial and professional needs and requirements can create ruptures and friction during their enrolment in teacher preparation programs and in early years of teaching. This also highlights the significance of tailored forms of financial, professional and personal support for career-change teachers while they adjust to the requirements of study and working in the teaching profession.

Financial responsibilities towards family, in particular, explains why many career-change teachers choose alternative pathways into teaching. These pathways offer what standard teacher education programs cannot offer for career-change teachers, namely a fast-tracked entry that combines a salary, study and learning on the job from the outset.

04

Challenges in the transition to study and teaching

The early years of teaching are difficult for all newly graduated teachers. However, career-change teachers often face additional challenges which can affect their sustainability within the profession. Transition to study and teaching is critical if the long-term intention of teachers is to stay in the profession. In this transition period, career-change teachers can face a number of challenges associated with:



Adjustment to professional identity



Transfer of skills



Establishing collegial relationships



Maintaining work/life balance



Meeting financial commitments



Self-efficacy and professional confidence



Mismatch between expectation and reality



Use of technology







Adjustment to professional identity

Specific to career-change teachers are challenges that confront their identity as they move from one profession to another. Career-change teachers can struggle with the adjustment of their professional identity associated with their previous career, as they begin to develop a professional teaching identity. [33]

In establishing a professional teaching identity that bridges careers, career-change teachers must balance the qualities of their previous profession and retain, discard or combine these with the development of their new professional identity. [34]

One of the biggest difficulties was actually around my identity as a teacher...

When career-change teachers' first-career knowledge and skills are under-acknowledged or undervalued, the transition to teaching and the development of a professional teaching identity can be more complex. [35] Refashioning the professional identity associated with one's previous career and adopting a teaching identity can be discomforting, with adverse impacts on self-esteem. [33]



Transfer of skills

There are widespread and common-sense beliefs about what teaching and learning entails. However, the skills that support quality teaching and learning are not self-evident and need to be learned and practised. Career-change teachers often bring up-to-date content knowledge and organisational-management skills from their previous careers and life experiences. [36] Yet, they still need to acquire and develop knowledge and skills that are specific to the teaching profession.

Of particular relevance is the alignment and transformation of content knowledge, that is the knowledge of subject matter, with and into pedagogical content knowledge, that is the knowledge of the most appropriate teaching approaches to enhance student learning. Career-change teachers also need to acquire and develop classroom-management skills, including behaviour-management strategies.

Research shows that there are a dynamic, complex and ongoing relationships between transferring previous knowledge and skills to acquiring and developing new skills for successful teaching, which can be particularly challenging for careerchange teachers. [36]



Establishing collegial relationships

Traversing the boundaries of one workplace to another, career-change teachers find themselves entrants into work environments with established structures, network of relations and practices. Professional and social supports can assist career-change teachers to adjust in their transition from one working environment to teaching and acquire domain-specific organisational knowledge and skills. ^[25]

Given the inherently relational nature of teaching and learning, for career-change teachers entering the school culture, joining pre-existing teams and professional network and establishing links with students, parents and the community can be challenging.

I would probably say building relationships with staff and students. So, you go into a new school and my cohort started in term two. That presented a unique complexity in the sense that the school year, it's already begun. I think just getting the students to understand that you're going to be their teacher, so you know, a pre-service or a student teacher, and maybe that understanding among staff as well, because I guess the program can be a little bit confusing at times. It isn't the traditional pathway into teaching, so having that understanding among fellow staff and students and then just getting to know you, like any job, but I think that was probably one thing.

Many career-change teachers may not feel at ease about asking for help and advice from other staff who might be younger but more experienced. This is, however, essential in learning about how a school operates.



Maintaining work/life balance

For many early-career teachers, teaching is a rewarding profession that offers a meaningful, fulfilling professional experience. Yet, the requirements of teaching can also be stressful and demanding for a novice teacher, with long hours of additional work. [37] Especially, teaching preparation and lesson planning tend to be time-consuming. More often than not, learning materials need to be developed from scratch or refined. For many, teaching can become a 'take home job' requiring much of the work to be done at home outside school hours.[19] This can create friction in maintaining a balance between attending to family responsibilities with the demanding commitments of teaching.

In the first term, I found it challenging to keep up with the demands of school and uni work. I was only a day or sometimes a few hours ahead of my lessons. Having been out of secondary school for many years now, I spent quite a bit of time re-learning the content. In addition, I was spending a lot of time in my lesson preparation. There have been several times throughout the year where I have felt overworked and exhausted keeping up with the demands of school, uni work and family commitments. During these times, I have asked for leave at school or extension to my uni assignments to manage.

For career-change teachers, the early years challenges associated with teaching can be more readily felt. Career-change teachers are more likely to have dependents such as aging parents or children and as such may face an extra layer of complexity in maintaining an appropriate work/life balance while looking after their own wellbeing. This is particularly challenging for career-change teachers for whom maintaining a healthy work/life balance and spending more time with their families is their career-change motivation.







Meeting financial commitments

Financial responsibilities and commitments can also provide challenges for career-change teachers. Many come from professions that provide greater financial remuneration than the teaching profession. Although altruistic reasons such as making a contribution provide compensation to some extent for the reduction in payment ^[25] reduced income can become a cause for concern for career-change teachers who have mortgages, personal loans, school fees, and other financial commitments.



Self-efficacy and professional confidence

Self-efficacy and confidence are important qualities for all teachers, including early-career and career-change teachers. The confidence and expertise accrued from achievement in a previous career can both support and undermine confidence and self-efficacy in teaching. [19, 37]

I guess, being a musician, being a composer, being a performer and then realising that other people don't see you as that. Even though to me that's the massive strength that I bring into my class there's an adjustment to balance that. So, I guess I've never wanted to just hundred percent be in the classroom and as a music teacher with one-to-one students, as well as classes of students.

In transitioning from a previous career to life as a student and an early-career teacher, responsibilities and levels of confidence will necessarily change, resulting in a repositioning of one's sense of career efficacy. ^[19] Upholding status and professional confidence associated with a previous career can be challenging.



Mismatch between expectation and reality

Despite their professional experience in other fields, career-change teachers may not be familiar with effective pedagogies and classroom-management strategies. The image and expectation about effective teaching for many, in fact, may date back to their own school years as students. [38] These images of teaching may be outdated and not correspond to the realities of contemporary classrooms.

I guess the biggest shock was the behaviour of students and how I was going to deal with that in this framework of positivity. I haven't lived inside of a secondary classroom since I left high school. It was very confronting that way.

The dynamics of teaching and learning has changed over the last few decades. There has been a shift from teacher-centred classroom and didactic pedagogies to learner-focused and collaborative pedagogies supported by technology.

The perception of teaching as involving a transfer of knowledge from the teacher to student has been superseded by more learner-centred approaches which prioritise building relationships with students ^[29] with renewed attention, especially in recent years to student wellbeing. ^[39]







Use of technology

With the shift towards learner-centred models comes the requirement to integrate technology into the classroom and teaching. For those career-change teachers who are proficient in the use of technology, this can be an easier undertaking than for those with less advanced ICT skills. [40] Teachers confident in the use of technology can more easily use and navigate school-based digital platforms for the curriculum, student information, assessments and administrative requirements.

With the online learning, just a bit more of the video of the campus, here's where you do this, a few things like how does this work. You know the young people are like oh you just do this, and this, and then we were briefly on campus. I'm on campus (trying) to get on to wireless internet connections, you know some of that practical stuff. That was a difficulty, you know, that I learned to work through.

Confidence in using presentation applications and software has been particularly relevant during the COVID-19 pandemic with the requirements of online teaching. The need for remote learning due to the pandemic was challenging for all teachers. For career-change teachers unfamiliar with video conferencing platforms such as Teams or Zoom, remote teaching presents additional challenges.

You're in and out of lockdown so there's a lot of change going on constantly in both your life and your students' lives and this is something that's new to all teachers and not just new teachers. You're sort of learning with them, while also learning a new profession itself. It feels like there's multiple layers to what you're doing sometimes. But I think focusing on that as a really good learning experience in something that's going to prepare you for the profession, you know, when hopefully lockdowns are a thing of the past, at some point, is one way that I've tried to frame it.

05



Supports in the transition to study and teaching

Career-change teachers can benefit from specific supports to overcome the challenges described above. These supports are integral to their successful transition and adaptation to teaching. [41] Despite evidence that highlights the importance of tailored forms of support, many career-change teachers may not receive the necessary support. Career-change teachers can benefit from support provided at the university as well as the school level.

University level support

The structure of standard pathways into teaching may not always respond to the needs of career-change teachers. For this reason, calls have been growing to adjust existing teacher education programs. Support in teacher education programs is essential given that these programs sit at the point of entry to the profession for career-change individuals, and their provisions can have a lasting impact on their wellbeing throughout the program.

Teacher education support may include:



Adjustment to study



Social networks of support



Mentorship and alumni support



Support to re-calibrate expectations



Adjustment to study

Universities can adjust their programs by providing online bridging courses that support career-change teachers to develop academic skills, such as essay writing, analysing academic literature and digital literacies. [27]

Teacher education programs can also provide support to career-changers to manage the varied demands placed on them due to the combined requirements of study, teaching and family-related commitments. Study-related supports can be provided via clear communications about exams and study requirements. [42] At the same time, teacher education programs can offer flexibility for attendance options for face-to-face or online learning for career-changers, and create collaborative learning groups. [27]

... the other one [support] was being able to contact [the course coordinator] and say yeah, I'm running late on this and I need an extension. I did that many times last year. So that extension, that was a pretty easy procedure to do so wasn't onerous. That was helpful yeah.

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Social networks of support

Social and professional support networks are crucial in successful transition of career-change teachers to study and teaching. Teacher education programs can respond to this cohort-specific need by creating cohort support systems in which career-change teachers share resources or form study-teaching communities to prepare for assignments, teacher registration and/or certification. [42]

Another thing that they've done is they've employed multiple interns with another person from Melbourne Uni with two other people from Deakin doing a similar program that Deakin offers. I found that to be a really productive factor. Having people in the same situation as you, but with the same experiences, is really crucial I think in providing that support, because then you've got sort of a shared understanding and you can maybe debrief about things that you wouldn't debrief with someone more senior about, even though I'm sure I could, if I wanted to. But it just sort of creates a bit more of a social aspect.



Mentorship and alumni support

Connecting career-change teachers with a university-based mentor early during the teacher education program can provide support in the transition period into teaching. Teacher mentors need to be familiar with the needs of career-change teachers and work closely with them throughout their study. University-based teacher mentors can also help strengthen the partnerships between schools and universities in teacher preparation.

The university provides us with what they call a clinical specialist, so someone who is an experienced teacher, sometimes an academic, sometimes someone who's been in more senior roles in schools. [...] I had a very good clinical specialist. She had a lot of experience working in schools such as mine, where sometimes the behaviour can be really challenging [...] I think in my first year that was really important because the behaviour was quite challenging and it took me quite a while to figure out how to teach in that environment and how to work with those students and she was very supportive in helping me out there in coming up with a plan and kind of structure in my lessons that can support me with that.

Additionally, alumni can be invited to speak about their experiences and answer career-change teachers' questions. [42] Given their previous experiences, this can be particularly helpful in providing an insider's perspective into the challenges associated with the transition and adjustment in teaching and the supports available.



Support to re-calibrate expectations

An important aspect of supporting career-changers in their transition to study and teaching involves working with them to develop more realistic expectations about themselves, their expectations and the teaching profession more broadly.

Becoming an effective teacher requires considerable investment in learning. Opportunities for learning to teach arise during teacher education programs, in one's own practice and from observing others. The process of learning to teach is more intense during the early years of teaching as teachers work towards developing more realistic expectations about the profession while improving their pedagogical knowledge and skills.

Teacher education programs need to create opportunities for career-change teachers to become familiar with the challenges that the transition to study and teaching might present. [36] This is important in mitigating the adverse impacts of career-change shock and future burnout as career expectations may not correspond neatly with the professional reality of teaching in schools and classrooms.

School level support

In addition to the supports provided by teacher education programs, career-change teachers can benefit from school level forms of support in their transition to teaching in early years, and later during their induction, a period of two to five years between finishing their university program and becoming a fully accredited teacher.

School level contributions and supports can be via:



Providing school-based teacher mentors



Developing socialprofessional networks of support



Providing school leadership support



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Providing school-based teacher mentors

To be successful, career-change teachers need to achieve a sense of autonomy and confidence and to establish strong relationships with colleagues. [43] This requires opportunities to engage with school-based teacher mentors as a link to the school community. [44]

Career-change teachers can benefit from supportive relationships with teacher mentors during their placement, the period during which they undertake study while teaching on a part-time basis in schools. Supportive school-based teacher mentors who give regular and consistent feedback, guide planning and resourcing and facilitate extended professional networks within the school community can provide much-needed support for new career-change teachers. [21]

My mentor is fantastic and has done a lot of additional work with me to help prepare me for lessons and also be in there with me and they brief afterwards. Within my department as well I've also got a very senior commerce teacher who has become almost like a second mentor. In his free time, he is doing things like coming into my classes and team teaching with me. He would spend conservatively four or five hours on my development. And that's all in his free time, so this isn't recognising him for that, it's about the people in my department really.

Career-change teachers can benefit from support of expert mentors in many ways including in developing their competence, improving teaching skills, knowledge transfer from teacher education program, and in socialisation within the institutional culture of schools. [45] It is particularly important for those who become teachers mid-career that teacher mentors recognise their previous career influences and build upon them rather than deny those skills and experiences. [46]



Develop social-professional networks of support

Many graduate teachers value the collegial support provided to them through the school community, especially during their transition period. [8] Social-professional networks of support, including programs that connect new and experienced teachers during professional practice, can help career-change teachers to connect to their school community. Establishing strong networks that encourage social and professional adjustment is important if career-change teachers are to make a positive transition to teaching and remain in the profession. [43, 45]

I've been really, really lucky, I think the school I've ended up with has been really super supportive. I have a great mentor who is always there when I need help. She's very supportive, full of really great experience that she's willing to share. Thankfully, we have similar sort of personality, so that means that you know our relationship has been really easy. I have a great team of people around me who have been completely accepting of me coming in, as somebody totally new, and being really supportive and helpful, from that point of view. I think that the transition to what I'm doing now would not have been as easy or as smooth or as rewarding. I don't think, if I hadn't had that team of people directly around me, it's a fairly big school and the Department has about 30 or so teachers in it, so there are a lot of people to draw on and the community spirit. It's been really productive which has helped a lot.

Schools can create situations where career-change teachers collaborate closely with more experienced teachers, for example, by co-planning and co-teaching classes. This provides career-change teachers with opportunities to share their skills, knowledge and experiences with other teachers, which adds to recognition of them being in the teaching profession. At the same time, this enables career-change teachers to make a contribution to the teaching and learning practices of their school. [35]



Providing school leadership support

School leadership teams and principals can play an important role in the transition of career-change teachers by introducing them to the school culture and offering counselling and support when needed. [44]

My school has provided a lot of support to ease my transition as an intern. I have a mentor at school who I meet every week for a period. She has been very helpful and I go to her for advice even outside our scheduled meeting time. The school also provides support for new staff and they organise meetings to coincide with important events such as report writing and parent teacher interviews to ensure that we know what to expect and to provide any help. The school also has a teacher who provides support to new staff so I can always contact her if I require any help with anything.

School leaders and principals can also consult career-change teachers, seeking their input in policy decisions in an effort to create partnerships between principals and school leadership teams and career-change teachers. [35] Finally, school leaders and principals can assist by offering more flexible working conditions to accommodate the challenges that career-change teachers experience, both during their placement and when they are employed. [47]

Conclusion

Career-change teachers constitute a significant portion of the teaching workforce internationally and in Australia. Recent growth in the number and range of alternative pathways into teaching, coupled with the shifts in the labour market dynamics due to the impacts of the COVID-19 pandemic, are likely to act as a catalyst to attract even more career-change individuals into teaching.

Despite the likely increase in the number of career-change teachers in the future, and their contribution to teaching young people and education more broadly, we are yet to develop a better understanding about the challenges that this cohort faces in their transition to study and teaching. Teacher education research has traditionally focused on those who enter teaching as their first career and often through standard pathways that offer longer preparation and opportunities to preview the job via short placements.

In this report, we drew on existing, albeit limited, research and studies that have specifically focused on the experiences of career-change teachers. We also engaged with first-hand accounts from a group of 17 career-change teachers enrolled in the Master of Teaching Secondary (MTSI) program at the Melbourne Graduate School of Education (MGSE) to provide empirical evidence about cohort-specific characteristics of career-change teachers, their contributions, as well as their needs in study and professional practice.

Recommendations

Flexibility to pursue study while working

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Tailor preparations

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Provide school level supports

Address systemic issues – low pay, heavy workloads, inadequate ongoing support, increasing administrative and bureaucratic duties

0

Recognise their motivations and expectations

•

Capitalise on their existing knowledge and skill sets

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We conclude by offering a set of recommendations from research and data presented in this report. To support the transition and retention of career-change teachers, supports are needed via pathways into teaching that offer flexibility to pursue study while working towards full teacher accreditation, tailored preparation strategies at universities and/or teacher education institutions, and school level supports and provisions to ensure career-change teacher retention during and beyond induction.

In addition to financial incentive and recruitment bonuses, a long-term strategy is needed to ensure most qualified teachers are attracted to and remain in the profession. Part of this strategy entails providing pathways into teaching that allow individuals to pursue teaching as their second-career. This is crucial in attracting the most qualified, passionate and capable individuals from other fields and professions into education.

Alternative pathways offer a model of teacher preparation that caters for the needs of individuals who would otherwise not have considered a career in teaching. These pathways, however, should not be viewed as easy fixes for wider problems about teacher shortages, especially in the most disadvantaged Australian schools that face high rates of teacher turnover. Recruitment and policy related factors coalesce with complex economic, social and structural factors to affect teacher retention in these schools.

Given the diversity and the range of alternative pathways into teaching, further research is needed to identify effective curriculum, pedagogical and professional practices within such programs. Learning to teach is a complex and lifelong process [48] with additional needs and requirements in schools within sites of social, material and historical disadvantages. [49]

To avoid reductionist solutions and ineffective remedies to the problem of teacher shortages, teacher preparation models need to take into account these complexities in their admission, preparation and certification policies and practices.

•••

While the availability of alternative pathways into teaching can help increase teacher supply, teacher shortage problems are likely to persist if education systems fail to address more systemic issues relating to relatively low pay, heavy workloads, inadequate ongoing support and ever-increasing administrative requirements and bureaucratic duties in teaching.

Teacher education providers can contribute through tailored preparation and support strategies that take into account the unique qualities and the needs of career-change teachers. This entails recognising and working with the professional motivation and expectations of career-change individuals in teaching, while capitalising on the knowledge and skill sets that they bring with them to the teaching profession.

Teacher education providers can also contribute to the successful transition of career-change individuals into study and teaching by offering adjustment to study requirements, providing support via experienced university-based mentors, and assisting in establishing more realistic expectations about what teaching in schools entails.

An effective university-school partnership is also crucial in supporting career-change teachers during their transition to study and teaching. University-school collaboration can help narrow the theory-practice gap in teaching and teacher education by assisting career-change teachers to make sense of and apply knowledge and skills acquired through studies to their day-to-day practices in classrooms.

At the school level, career-change teachers can benefit from supports provided via school-based teacher mentors who can help them become familiar with school processes and routines, build their social-professional networks and navigate the challenges that arise during their professional practice. Research has identified a need for induction support for novice teachers. For instance, beginning secondary science teachers who enter teaching through an alternative certification program have benefitted from targeted induction programs. [50]

Last, but not least, support from school leadership and principals is crucial to long-term sustainability within the profession. School leaders and principals need to make the necessary adjustment to work, provide induction support and opportunities for professional learning.

References

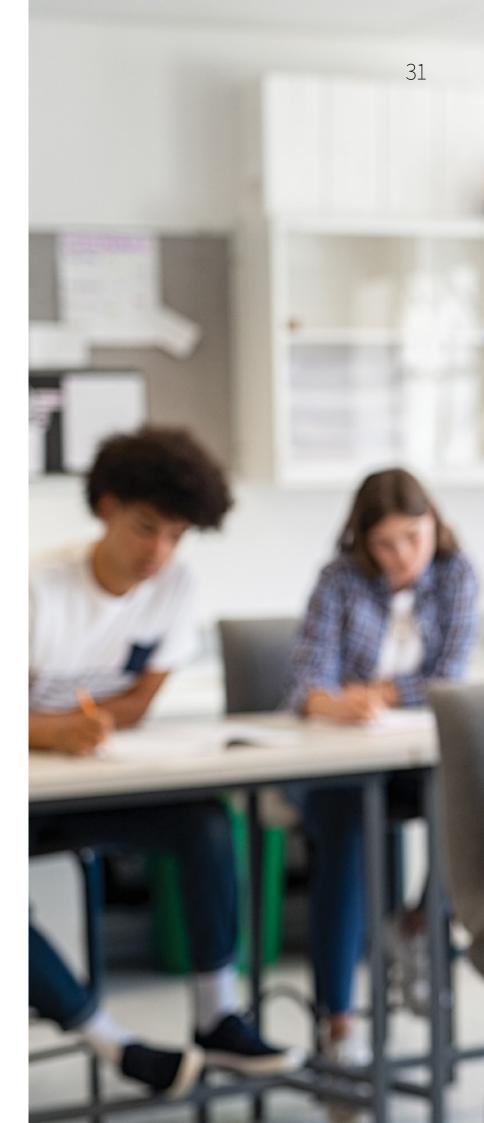
- Weldon, P., Early career teacher attrition in Australia: Evidence, definition, classification and measurement. Australian Journal of Education, 2018. 62(1): p. 61-78.
- King, R.M., Reasons career-changers choose public education: A profile. 2008, Capella University.
- Williams, J. and H. Forgasz, The motivations of career-change students in teacher education.
 Asia-Pacific Journal of Teacher Education, 2009. 37(1): p. 95-108.
- See, B.H. and S. Gorard, Why don't we have enough teachers?: A reconsideration of the available evidence. Research Papers in Education, 2019: p. 1-27.
- Dolton, P., Teacher supply. Handbook of the Economics of Education, 2006. 2: p. 1079-1161.
- Dolton, P., A. Tremayne, and T.P. Chung, The economic cycle and teacher supply. Vol. 96. 2003: OECD Paris.
- 7. Falch, T., K. Johansen, and B. Strøm, Teacher shortages and the business cycle. Labour Economics, 2009. **16**(6): p. 648-658.
- Willlams, J., Constructing a new professional identity: career-change into teaching. Teaching and teacher education, 2010. 26: p. 639-647.
- Sutcher, L., L. Darling-Hammond, and D. Carver-Thomas, A coming crisis in teaching? Teacher supply, demand, and shortages in the US. 2016, Palo Alto, CA: Learning Policy Institute.
- Australian Institute for Teaching and School Leadership, *Initial teacher education: Data report* 2019. 2019, Melbourne: AITSL.
- OECD, TALIS 2018 Results (Volume I): Teachers and school leaders as lifelong learners. 2019: OECD Publishing.
- European Commission, Education and Training Monitor. 2019, Publications Office of the European Union: Luxembourg.
- Darling-Hammond, L., Teacher quality and student achievement. Education policy analysis archives, 2000. 8: p. 1.
- OECD, Effective teacher policies: insights from PISA.
 2018: OECD Publishing.
- Department of Education and Training. Targeted initiative to attract more teachers. 2021 [cited 2021 September 8].
- Haim, O. and L. Amdur, Teacher perspectives on their alternative fast-track induction. Teaching Education, 2016. 27(4): p. 343-370.
- Premier of Victoria. Biggest-Ever Investment In Teaching Quality In Victoria. 2019 [cited 2020 27 May]; Available from: https://www.premier.vic.gov.au/biggest-ever-investment-teaching-quality-victoria

- Department of Education Skills and Employment. Alternative Pathways. 2020 [cited 2020 27 May]; Available from: https://www.dese.gov.au/ teaching-and-school-leadership/alternative-pathways
- Beutel, D., L. Crosswell, and T. Broadley, Teaching as a 'take-home' job: understanding resilience strategies and resources for career-change preservice teachers. Australian Educational Researcher, 2019. 46(4): p. 607-620.
- Bauer, C., S. Thomas, and C. Sim, Mature age professionals: Factors influencing their decision to make a career-change into teaching. Issues in Educational Research, 2017. 27(2): p. 185.
- Crosswell, L. and D. Beutel, 21st century teachers: How non-traditional pre-service teachers navigate their initial experiences of contemporary classrooms. Asia-Pacific journal of teacher education, 2017. 45(4): p. 416-431.
- Dadvand, B. and M. Dawborn-Gundlach, The challenge to retain second-career teachers, in Pursuit. 2020, University of Melbourne: Melbourne.
- Garoni, S. and J. Lampert, Speculating on teacher attrition in Australia: Might COVID-19 be 'the straw that breaks the camel's back'?, in EduResearch Matters. 2020, The Australian Association for Research in Education.
- 24. Cahill, H. and B. Dadvand, *Triadic labour in teaching for the prevention of gender-based violence*. Gender and Education, 2020: p. 1-15.
- Anthony, G. and K. Ord, Change-of-career secondary teachers: motivations, expectations and intentions. Asia-Pacific Journal of Teacher Education, 2008. 36(4): p. 359-376.
- Zuzovsky, R. and S. Donitsa-Schmidt, Turning to teaching: Second career student teachers' intentions, motivations, and perceptions about the teaching profession. International Education Research, 2014. 2(3): p. 1-17.
- Varadharajan, M., J. Buchanan, and S. Schuck, Changing course: The paradox of the career-change student-teacher. Professional Development in Education, 2018. 44(5): p. 738-749.
- Kember, D., Transitions Into Teaching for Career-change Professionals. International Journal of Pedagogies and Learning, 2008.
 4(5): p. 48-57.
- Živković, P., Second-career teachers' professional identity and imposter phenomenon: nexus and correlates. Journal of Educational Sciences & Psychology, 2021. 11(1): p. 26-38.
- Trent, J., "It's like starting all over again". The struggles of second-career teachers to construct professional identities in Hong Kong schools.
 Teachers and Teaching: Theory and Practice, 2018. 24(8): p. 931-950.

- Shulman, L.S., Those who understand: Knowledge growth in teaching. Educational researcher, 1986. 15(2): p. 4-14.
- Varadharajan, M., et al., Career-change student teachers: lessons learnt from their in-school experiences. The Australian Educational Researcher, 2020: p. 1-18.
- Snyder, C., A.W Oliveira and L.M Paska, STEM career-changers' transformation into science teachers. Journal of Science Teacher Education, 2013. 24: p. 617-644.
- Grier, J.M. and C.C. Johnston, STEM professionals entering teaching: Navigating multiple identities. Journal of Science Teacher Education, 2012. 23 (1): p. 19-44.
- Trent, J. and X. Gao, 'At least I'm the type of teacher I want to be': second-career English language teachers' identity formation in Hong Kong secondary schools. Asia-Pacific Journal of Teacher Education, 2009. 37(3).
- Tigchelaar, A., N. Brouwer, and F. Korthagen, Crossing horizons: Continuity and change during second-career teachers' entry into teaching. Teaching and Teacher Education, 2008. 24(6): p. 1530-1550.
- Bar-Tal, S. and I. Gilat, Second-Career Teachers Looking in the Mirror. Journal of Multidisciplinary Research (1947-2900), 2019. 11(2): p. 27-50.
- Lortie, D., Schoolteacher: A sociological study.
 1977, Chicago: The University of Chicago Press.
- Cahill, H., B. Dadvand, and A. Gowing, Taking a Wellbeing-Centric Approach to School Reform, in The Oxford Encyclopedia of School Reform, W. Pink, Editor. 2021, Oxford University Press: London.
- Rowston, K., M. Bower, and S. Woodcock, The lived experiences of career-change pre-service teachers and the promise of meaningful technology pedagogy beliefs and practice. Education and Information Technologies, 2020. 25(2): p. 681-705.
- Resta, V., L. Huling, and N. Rainwater, Preparing second-career teachers. Educational Leadership, 2001. 58(8): p. 60-63.
- Castro, A.J. and M. Bauml, Why Now? Factors Associated with Choosing Teaching as a Second Career and Their Implications for Teacher Education Programs. Teacher Education Quarterly, 2009. 36(3): p. 113-126.
- Watters, J.J.D and M. Carmel Challenges confronting career-changing beginning teachers: A qualitative study of professional scientists becoming science teachers. Journal of Science Teacher Education, 2015. 26: p. 163-192.
- Keck Frei, A., M. Kocher, and C. Bieri Buschor, Second-career teachers' workplace learning and learning at university. Journal of Workplace Learning, 2021. 33(5): p. 348-360.

- Jorissen, K.L., Successful career transitions: Lessons from urban alternate route teachers who stayed. The High School Journal, 2003. Feb/March 2003.
- 46. Mayotte, G., Stepping stones to success: Previously developed career competencies and their benefits to career switchers transitioning to teaching.

 Teaching and Teacher Education, 2003. 19: p. 681-695.
- Kolde, K. and M. Meristo, A Second Career Teacher's Identity Formation: An Autoethnographic Study. International Journal of Adult, Community & Professional Learning, 2020. 27(2): p. 29-44.
- Dadvand, B. and F. Behzadpoor, Pedagogical knowledge in English language teaching: A lifelong-learning, complex-system perspective. London Review of Education, 2020. 18(1): p. 107-125.
- Moss, J., et al., Teacher educators and the pedagogical and curriculum complexity of Teach For All in Australia, in Examining Teach For All. 2020, Routledge. p.157-178.
- Roehrig, G.H. and J.A. Luft, Does One Size Fit All?
 The Induction Experience of Beginning Science
 Teachers from Different Teacher-Preparation
 Programs. Journal of Research in Science
 Teaching, 2006. 43(9): p. 963-985.



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