# Identity, professional development and the good, average and weaker teacher

Identitás, szakmai fejlődés és a jó, az átlagos és a gyengébb oktató

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#### **Abstract**

This work provides examples of Weinreich's Identity Structure Analysis (ISA), Nomothetic Analyses of 3 groups of teachers. The groups were formed in response to ratings of the teachers as good, average or weaker by their Principals. The analyses indicate that ISA nomothetics may hold potential for differentiating among good, average and weaker teachers. Summaries of the analyses close the work. They present possible paths for the provision of group-specific Professional Development which speaks to the potential for improvements in teacher identity.

**Keywords:** teacher identity, Identity Structure Analysis, raw scores, teacher turnover

#### Absztrakt

A tanulmány szerzői Weinreich identitásstruktúra-analízisének (ISA) módszerét alkalmazva, három csoport nomotetikus elemzését végzik el. A csoportok kialakítása, a jó, az átlagos vagy gyengébb tanárok megkülönböztetése vezetői értékelés nyomán történt meg. Az elemzésből kiderül, hogy az ISA nomotetikus használata egy lehetséges módszert kínál a jó és az átlagos tanárok közötti megkülönböztetésre. Az elemzések összefoglalójával zárjuk a kutatás bemutatását. A kutatás lehetőségeket vázol fel a csoportspecifikus szakmai fejlődésre-fejlesztésre vonatkozóan, és a tanáridentitás fejlesztésének egy potenciális útját mutatja be.

Kulcsszavak: tanár-identitás, identitásstruktúra-elemzés, nyerspontok, tanárok fluktuációja

#### Introduction

Teacher turnover refers to teachers leaving the profession. It has two components: attrition from the profession and migration to other schools (Ingersoll, 2001). Teachers in high-poverty schools are more likely to migrate, (Simon & Johnson, 2015; Federicova, 2021). School poverty aside,

teachers are most vulnerable to turnover in the first 5 years of their careers as they strive to acquire necessary skills and expertise (Luekens et al., 2004; Redding & Henry, 2019). Johnson, Berg and Donaldson (2005) note that turnover imposes instructional, organizational and financial costs on society. Early education has implications on young children's societal-emotional functioning (Burchinal et al., 2010), teacher sensitivity, responsiveness to children's needs, developing positive interactions, emotional support, and instructional support, all stimulate children's development (Peisner-Feinberg et al., 2001). Teachers unsatisfied with their working conditions have been found to be less equipped to promote children's development (Jennings & Greenberg, 2009) and less able to create an environment for quality environment for children (Buettner et al., 2016). Teachers' personal or work-related stress can inhibit their ability to provide consistent emotional support that children need for positive development (Hamre, 2014). Teachers undergoing high stress have reduced capacity to exhibit positive emotions and foster a positive and thieving classroom environment (Lazarus, 2006; Zinsser et al., 2013).

School boards introduced induction programs to provide new teachers with guidance and support such as mentor advice and group lesson planning. These programs have worked to offset turnover, but only to a degree (DeAngelis & Presley, 2011; Ingersoll, 2001; Ingersoll & Smith, 2003). The problem of turnover continues (Carver-Thomas & Darling-Hammond, 2019). For example 50% of Finnish teachers report an intention to leave the profession (Räsänen et al., 2020).

Turnover is U-Shaped (Kirby & Grissmer, 1993; Ingersoll, 2001) with those who leave tending to be retirees and young teachers with less than five years experience (Luekens et al., 2004). Beyond the fifth year of employment, attrition rates decline significantly (Ingersoll & Smith, 2003; Mark & Anderson, 1978, 1985). Early onset turnover is not a new phenomenon. In the 1950s, 50 per cent of qualified Illinois teachers left the profession within 2 years (Charters, 1956). In Oregon, Charters (1970) reported turnover at 5 years to be 60 per cent for males and 70 per cent for females. Mark and Anderson (1978, 1985) reported high rates of teacher turnover in the early years and Johnson, Berg and Donaldson (2005) made note that 15.1 per cent of the US teaching population left in 2000-2001 as compared with 12.4-13.5 per cent in the late 1980s to mid-1990s. Over a 30-year period in Chicago, DeAngelis and Presley (2011) reported 40 per cent turnover within 5 years. In eastern Europe turnover increased following the economic and political transition of 1989 and this was especially so in the case of male teachers (Federicova, 2021). Salaries in eastern Europe are less than in the rest of Europe but adding to this problem (as is the case across the continent) is the fact that teaching is not seen as a valued profession (Katsarova, 2020).

While turnover is associated with lowered student achievement (Goldhaber, 2007; Henry & Redding, 2020), high teacher quality can have a positive effect on student learning (Heck, 2007; Ingersoll, 2001; National Commission on Teaching and America's Future, 2003). Unfortunately, it is higher quality teachers who are most likely to leave the profession (Federicova, 2021). Fortunately, teacher effectiveness increases with time in the classroom (Murnane & Philips, 1981, European Commission, 2013). Thus, if we can equip administrators with the capacity to identify early-year teachers who are likely to leave the profession we can focus PD efforts toward retaining them and increasing their effectiveness.

#### The study and the ISA method

Passmore, Ellis and Hogard (2014) argued for greater use of Weinreich's (2003) Identity Structure Analysis (ISA) to assess identity. Their reasoning was that ISA has advantages over other identity assessment methods. Firstly, it is based in more than one theory of identity. Secondly, it provides for the development of multiple instruments to assess multiple facets of identity in multiple situations. Finally, it has a dedicated software (Ipseus) that automates the analytic process. At the time, ISA was the only identity assessment method associated with a dedicated software. Note that since 2014, a mobile app for ISA data collection (Passmore & Prescott, 2022) has been created. The App can accommodate an ISA instrument of any size but it was developed to encourage the use of smaller instruments on small screens (phones and tablets) so as to render ISA data collection less time consuming and more convenient than is the case for full ISA instrument completion on a PC using Ipseus. Data collected with the App is easily imported into Ipseus for subsequent ISA analysis. The App (ISApp) is available on Google Play and the App Store.

In this study, an instrument was developed to assess teacher identity (Appendix) using Ipseus. When a teacher enters Ipseus, a matrix of the constructs and entities of the instrument is generated. With the matrix in place, the teacher is presented the first construct/entity combination. A rating along a 9-point (-4-+4) scale is provided to indicate where the teacher feels that that entity lies regarding the construct under consideration. With the first rating complete, Ipseus provides the next entity/construct pair of the matrix. The process continues until ratings for all the entity/construct combinations of the matrix have been completed. With the instrument complete, Ipseus calculates quantitative values for the parameters of the ISA method and makes the results available as a 20-page report. Weinreich (personal communication) developed a template to simplify, focus and guide the interpretation of ISA reports. The template calls for review of the ISA parameters in the following order:

- Report core and conflicted dimensions of identity.
- Report idealistic and contra-identifications with influential others.
- Compare empathetic identifications for 2 current entities of self and one past entity of self.
- Report identity conflicts for 2 current entities of self and one past entity of self.
- Report evaluations of and ego-involvement with influential others.
- Report on the intersection of evaluations of entities of self and identity diffusion.

The constructs and entities of the teacher instrument used in this study represent a simplified version of a larger instrument. Simplification was required to accommodate a language issue across the instrument (composed in English) and the first language of the participants (the teachers worked in 3 Hong Kong schools). Eighteen teachers, 6 teachers from each of the 3 schools completed the instrument. Geographic distance between the researcher and the teachers meant that they were required to complete the instrument using a Google form. The form data was downloaded and imported into Ipseus for analysis. Beyond completing the ISA instrument, the teachers provided demographic information: gender, subject taught, and years in teaching. Additional demographic information was obtained from the teachers' principals who rated them

as good (7 teachers), average (9 teachers) or weak (2 teachers). ISA provides for ideographic and nomothetic analyses. The latter analysis option is used in this work to assess the groups.

Teacher identity is a separate (Beijaard et al., 2004) and important (Lamote & Engels, 2010) research area. Professional identity's importance lies in its association with teacher quality, professional development, attitude to professional change, and student attainment (Lamote & Engels, 2010). It is proposed that the teachers rated as weak are the teachers most likely to experience stress and thus they will be the teachers most likely to turnover. This being the case, weak teachers are likely be the teachers most in need of accommodative professional development (PD). On the assumption that these arguments hold true, this work explores the issue of whether we can use Weinreich's (2003) Identity Structure Analysis (ISA) to differentiate between groups of good, average and weak teachers. Also explored is the thinking that administrators might use summaries of ISA analyses to better direct their PD and thus improve the quality of their teachers. It is held that such thinking also applies to administrators and faculty working in higher education. Finally, this work aims to showcase improvement upon the original approach to the interpretation of Ipseus reports by making use of Weinreich's template and using the raw scores (scores that the teachers enter to complete the instrument) to build upon the analytic findings that ISA typically provides. Weinreich's goal in developing a Template for each ISA parameter was to merge the findings for each ISA parameters into a simple summary that professionals and non-professionals alike might take up in their work. Consequently, the work closes with summaries of the ISA findings and the implications for PD for each group of teachers.

#### **ISA** results

## Structural Pressure and Emotional Significance

Emotional Significance: minimum value = 0.00, maximum value = +10.00

The emotional significance of a construct used in appraisal of the teacher's social world is defined as the strength of affect associated with the expression of the construct. The index of standardised emotional significance can range from 0.00 to 10.00, from a construct being of no emotional significance to one that is of maximal significance for the individual.

Structural Pressure: minimum value = -100, maximum value = +100

Structural Pressure (SP) is an ISA parameter that reflects the consistency with which a construct is used to evaluate entities. High structural pressure is associated with constructs that are used in consistent manner to evaluate others. These constructs represent the core, stable evaluative dimensions of the identity under consideration. Low structural pressure is associated with constructs that are used to evaluate others in different ways depending on circumstance and context. Low structural pressure suggests areas of stress and indecision; conflicted dimensions liable to poor decision making. Core and conflicted constructs across the teachers are presented below.

**Table 1** *Core and conflicted values and beliefs of the weak teachers* 

Core Co	Core Constructs		Emotional	
Pole 1	Pole 2	Structural Pressure	Significance	
Deals with awkward	Confronts awkward	59.0	8.16	
people by appealing	people			
to everyday rules				
Feel there is a lot I can	Feel there is little I can	58.05	9.30	
do to get students to	do to get students to			
value learning	value learning			
Prioritizes achievement	Prioritizes welfare	48.52	5.98	
Conflicted	constructs			
Pole 1	Pole 2			
Is straightforward with	Plays games with	-18.05	7.71	
people	people			
Communicates well	Is remote from parents	-30.87	10.00	
with parents				

Core Constructs. Table 1 reveals that the core constructs of the weak teachers concern: dealing with awkward people by appealing to everyday rules, feeling there is a lot they can do to get students to value learning and prioritizing achievement. The first 2 of these core constructs are associated with high-level emotional significance and are as such they are very much on the teachers' radar when they consider the nature of the job of teaching. Borderline low/moderate emotional significance weighs on prioritizing achievement over welfare and as such the teachers may not be aware of the influence it holds over their professional identity. Interestingly, all the weak teachers' core constructs fall in the theme of approach to classroom management and teaching.

Conflicted Constructs. The weak teachers have 2 conflicted constructs. They struggle with the notion of being straightforward with people or playing games with them (a team player construct) and they cannot decide whether it is better to communicate effectively with parents or operate remotely from them (a construct in the approach to classroom management and teaching theme). Playing games or being straightforward with people is associated with moderate emotional significance. The weak teachers may not recognise that it may represent a troublesome arena. Communications with parents on the other hand is a construct of maximal emotional significance. That it is another construct of approach to classroom management and teaching highlights the prominence that this theme holds over the weak teachers.

## Potential action points for PD

Suggestions for ISA guided mentoring toward better performance might fruitfully begin with consideration of better coping mechanisms for dealing with the issues that surround conflicted constructs. These are arenas where a person (or group) is not sure of their stance and as such is likely to be open to suggestions. Another tack is to develop a coping strategy that links a conflicted

construct to one that is core. Success here can give a person more to think about than the issues that surround core aspects of their identity. Pressure for change around core constructs will likely be resisted for in these areas a person (or group) is sure of their thinking.

Mentoring can assist career development through education and the enhancement of knowledge and experience (Barker, 2006). However, mentoring can also have a psychosocial supporting mentee through role modelling, counseling, coaching and friendship (Kram, 1985). Another benefit is confidence building (Anderson, 2005), linked to career motivation and self-efficacy (Day & Allen, 2004). Mentoring can provide support for teachers and help student teachers develop strategies to cope with challenges.

To tackle the weak teachers' conflicted constructs directly question them to uncover the source of confusion. For example, ask them about how they see parental communications impacting their ability to manage and teach a class. With this information to hand decide how to set about developing appropriate professional development. If questioning and developing policies for problem resolution does not appeal, another tack would be to hold meetings where the teachers can bring up problems for open discussion so that they can collectively form plans that they understand, agree upon and feel confident in implementing. Given that conflicted constructs represent arenas where poor decision making resides, and given the extreme emotional significance associated with parental communications, administrators would do well to help the teachers become better aware of when, where and how to communicate with parents to better their classroom management and teaching. The alternate tack of linking a conflicted construct to a core construct might begin by asking the teachers to consider how dealing with people by way of everyday rules might impact their communications with parents. Consider training needs that may support teachers.

 Table 2

 Core and conflicted values and beliefs of the average teachers

Core Constructs		SP	Emotional Significance
Pole 1	Pole 2		
Communicates well with parents	Is remote from parents	52.14	7.61
Puts the needs of students first	Puts personal needs first	35.91	8.23
Becomes closely involved with	Maintains a formal relationship	31.04	7.40
students			
Deals with awkward people	Confronts awkward people	30.71	6.61
by appealing to everyday rules			
Feel there is a lot I can do to	Feel there is little I can do to get	27.31	7.03
get students to value learning	students to value learning		
<b>Conflicted Constructs</b>			
Pole 1	Pole 2		
Prioritizes achievement	Prioritizes welfare	-14.86	6.64

Core Constructs. The constructs listed as core for the average teacher concern communicating well with parents, putting the needs of students first, becoming closely involved with students, dealing with awkward people by appealing to everyday rules and feeling there is a

lot they can do to get students to value learning. It should be noted that only communicating well with parents is truly core. The remaining 'core' constructs are associated with structural pressure that accords them secondary core status. This finding is likely the result of the somewhat larger number of teachers involved in this nomothetic analysis (9) compared to the group of weak teachers (2). When larger numbers are involved, it may be the case that the variety of different pressures and stresses across participants see to it that high structural pressure cannot manifest. This is not to say that an ISA analysis of a great many teachers will always result in secondary status for 'core' constructs, but it does suggest that further research is required. Two themes dominate the average teachers' 'core' constructs; relationship with students (puts the needs of students first and becomes closely involved with students) and approach to classroom management and teaching (communications with parents and approach to dealing with awkward people).

Conflicted Constructs. Only one construct is conflicted for the average teachers; prioritizes achievement vs prioritizes welfare. It is of moderate emotional significance, and it is part of the approach to classroom management and teaching theme. To tackle the average teachers conflicted construct the same approaches as recommended for the weak teachers can be adopted. Directly question them to uncover the source of confusion. That is, ask them when they struggle over whether to prioritize the welfare of students or academic achievement and use the information gleaned to develop advisements for professional development. Alternately, hold meetings where the teachers can collectively form plans that they feel comfortable adopting for the purpose of tackling this conflicted construct. Linking a conflicted construct to a core construct might be accomplished by asking the average teachers to consider circumstances when prioritizing achievement (or welfare) necessarily results in poor communication with parents or by asking them to reflect on circumstances where prioritizing welfare or achievement impacts ability to put the needs of student first.

**Table 3**Core and conflicted values and beliefs of the good teachers

Core Constructs		SP	Emotional Significance
Pole 1	Pole 2		
Feels there is a lot I can do to	Feel there is little I can do to get	59.51	8.73
get students to value learning	students to value learning		
Puts the needs of students first	Puts personal needs first	57.25	9.71
Communicates well with parents	Is remote from parents	54.17	8.48
Becomes closely involved with	Maintains a formal relationship	71.84	7.89
students			
Sides with society's disadvantage	Sides with the advantaged in	69.58	5.39
	society		
Conflicted Co	onstructs		
Pole 1	Pole 2		
Believes there is no finer job	Believes there are better jobs than	25.20	7.25
than teaching	teaching		
Depends on others in making	Prefers to work things out alone	24.07	6.46
decisions			

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Deals with awkward people	Confronts awkward people	18.77	7.14
by appealing to everyday rules			
Prioritizes achievement	Prioritizes welfare	17.28	6.84
Follows a firm agenda when	Deals with difficulties creatively	15.55	6.70
dealing with difficulties			
Takes issue with the way things are	Supports the way things are	1.08	6.47
Is straightforward with people	Plays games with people	-21.31	7.10

Core Constructs. Like the average teachers the good teachers exhibit no constructs that are truly core. Here again this may be due to a lowering or 'averaging effect' across the identities of a nomothetic ISA analysis. Secondary core constructs do not indicate with the same reliability as core constructs that the behaviours that teachers will most likely adopt will be those of their favoured pole. Nonetheless, they likely point to the behaviours that the good teachers will most frequently adopt. The favoured poles of the secondary core constructs are: feel there is a lot I can do to get students to value learning, put the needs of students first, communicates well with parents, becomes closely involved with students, and, sides with the disadvantaged in society. Only 2 themes are represented in the above list; approach to classroom management and teaching (feel there is a lot I can do to get students to value learning, communicates well with parents) and relationship with students (puts the needs of students first, becomes closely involved with students, sides with society's disadvantaged).

Conflicted Constructs. The good teachers struggle with more issues than the average and the weak teachers. Their conflicted constructs straddle all 4 the themes of the instrument. Approach to classroom management and teaching (deal with awkward people by appealing to everyday rules, prioritize achievement), team player (believe there is no finer job than teaching, take issue with the way things are, and, play games with people), relationship with students (sides with the disadvantaged in society), and, approach to problem solving (prefers to work things out alone, deals with difficulties creatively). It should be noted that ascertaining whether to deal with people straightforwardly or by playing games with them is by far the most stressful construct for these teachers.

#### Potential action points for PD

Tackle the good teachers' conflicted constructs with the approach to ISA-guided mentorship that was prescribed for the weak and average teachers. Begin by directly question them to uncover the source of their stress. As indicated earlier, mentoring can support and educate mentees in coping strategies and ways to reduce stress. Teachers stress has been linked to several factors including student behavior as well as workload (Chaplain, 2008; Klassen & Chiu, 2011). Teacher stress has also been related to teacher self-efficacy and job satisfaction (Collie et al., 2012). Mentoring can help support mentees to understand and tackle these issues.

For example, ask them about situations where they struggle over whether to deal with people straightforwardly or play games with them. Use the information gleaned to develop suggestions to guide professional development. As with the other groups of teachers, a mentor or administrator could provide for regular meetings where the teachers form plans for tackling their

conflicted constructs. The alternate tact of linking a conflicted construct to a core construct might be a question such as: consider those scenarios where standing up to awkward people or appealing to everyday rules will serve them best in their communications with parents.

## Idealistic and contra-identifications with others

Idealistic identifications (II) point to a person's role models. They indicate the characteristics a person will seek to emulate over the long term. Contra-identifications (CI) indicate negative role models. Those who possess characteristics from which a person wishes to dissociate.

**Table 4** *Idealistic identifications of the groups of teachers* 

Weak Teachers	II	Average Teachers	II	<b>Good Teachers</b>	II
Good teacher	0.67	Good teacher	0.58	Good teacher	0.71
Closest family member	0.58	Good student	0.57	Person I admire	0.71
Person I admire	0.58	Person I admire	0.56	Closest family member	0.57
Good student	0.54	Closest family member	0.54	Typical artists today	0.57
School principal	0.46	School principal	0.50	Good student	0.55
	CI		CI		CI
Person I do not like	0.50	Person I do not like	0.66	Person I do not like	0.74
Disruptive student	0.38	Disruptive student	0.42	Disruptive student	0.46
				Politicians today	0.42

The weak teachers show significant positive affiliation with the work-related entity 'good teacher'. Moderate positive affiliation is seen for other work-related entities 'school principal' and 'a good student'. In Passmore and Prescott (2022) the reasoning behind the use of raw scores is delineated in full. In summary, this reasoning is that descriptions of ISA parameters reveal constructs where entities of the instrument differ or are the same relative to the parameter under review. In the case of the idealistic identification parameter, ISA looks to similarities between the qualities of an admired entity and those of an entity of self. To align with this description, a review of the raw scores that the teachers inputted into Ipseus is conducted to reveal the constructs where the entity 'me at work differs from the admired entity 'a good teacher'. Where amongst these differences the good teacher (ideal entity of self) lies closer to the favoured pole of a construct is said to be indicative of the teachers' long-term aspirational behaviours. It should be noted that the implementation of findings from analyses of raw scores is as yet untested in the field. The reader is asked to hold the latter point in mind when considering the findings of this report.

## Potential action points for PD

The biggest difference in a characteristic the weak teachers associate with themselves at work at the present time relative to the good teacher lies with the way they deal with difficulties. Where they see themselves as following a firm agenda, they see the good teacher dealing with difficulties creatively. Current self, relative to the 'good teacher' is also seen to be deficient when it comes to: feeling they can get students to value learning, dealing with awkward people by appealing to everyday rules, siding with the disadvantaged in society, and, putting the needs of students first. Given that idealistic identification represents long-term behavioural aspirations, attempts by administration to help the weak teachers take on these behaviours (behaviours where they see self falling short relative to the admired entity a 'good teacher') would likely be of value. This reasoning may be particularly useful in regard to the constructs, feel there is a lot they can do to get students to value learning and deal with awkward people by way of everyday rules as they are core constructs for the weak teachers. Finally, it is worth noting that the weak teachers indicated that they felt that the 'good teacher' would be more inclined to state that there is no finer job than teaching. The construct 'believe there is no better or better jobs than teaching' was designed to assess commitment to the profession (and by extension likelihood to turnover). This being the case, it may be that PD designed to help the weak teachers more frequently and more comprehensively express behaviours they see in the good teacher may also see them move toward a more committed stance toward the job of teaching.

The weak teachers' negative identification at school is with a disruptive student whose raw scores relative to 'a good student' suggest that they see these students as: selfish, confrontational, more concerned with their own welfare, more inclined to depend on others in decision making, and more likely to feel there is little they can do to get students to value learning. Administration would benefit by providing PD to help these teachers see how and why disruptive students may struggle in these areas. Focus the PD on the 2 constructs that are core: why they feel the disruptive student might think that there is little they can do to get them to value learning and why these students might confront awkward people. Greater empathy may enhance the weak teachers' ability to reach these students, raise their performance and by extension, the performance of the teachers' schools.

Another important aspect is teacher identity. The development of a teachers' identity has been found to be paramount in becoming a teacher (Alsup, 2005; Friesen & Besley, 2013). Resilience and retention are two important aspects of a strong identification with the teaching profession (Bieler, 2013). A lack of identity on the converse, can cause stress, burnout and ultimately retention issues (Lachman & Diamant, 1987). What is important to note is that teacher identity development can take time and comprise of periods of exploration, uncertainty and conflict (Meijer et al., 2011). This identity development could be supported through the ISA and mentoring process.

The work-related entity of greatest positive affiliation for the average teachers is the good teacher. Relative to me at work the good teacher is seen to communicate more effectively with parents and to more often side with the advantaged in society. Develop PD to help the average teacher reach these long-term aspirations. Focus particularly on communications with parents as it is a core construct. The work-related entity of notable contra-identification for the average teachers is the disruptive student. In comparison to the admired good student this entity is seen to:

engage in better parental communications, feel there is a lot these teachers can do to get them to value learning, deal with awkward people by appealing to everyday rules, side with the advantaged in society, put the needs of students first, become closely involved with students, deal with problems creatively and feel that there is no better job than teaching. Like the approach for the weak teachers, provide PD to help the average teachers better empathise with the disruptive students' perceived behaviours.

For teachers rated as good, the 'good teacher' entity is seen to believe to a greater degree that there is a lot they can do to get students to value learning. Given that this is the primary core construct for this group of teachers it is likely that PD in this area will be of use. Regarding contraidentification, the disruptive student is again seen to be at issue. From the good teachers' perspective, the disruptive student is seen to communicate poorly with parents, feel there is little they can do to get them to value learning, be confrontational with awkward people, put personal needs first and believe that there are better jobs than teaching. PD to help the good teachers see why the disruptive student might struggle in these areas is recommended as per the other teacher groups.

## Empathetic identifications with others

Empathetic Identification: minimum value = 0.00, maximum value = 1.00

Whereas idealistic identifications represent long-term aspirations; empathetic identifications are of the here and now. Change in empathetic identifications across context and mood states reflect potential for change in behaviour.

**Table 5** *Empathetic identifications of the groups of teachers* 

	Me at Home	Me at Work	Me as a student teacher
	Closest family member	Person I admire (0.52)	Closest family member
	(0.85)	Politicians today (0.49)	(0.79)
	Good Teacher (0.85)	Closest family member	Disruptive student (0.65)
	Good student (0.69)	(0.41)	Good teacher (0.61)
Weak Teachers	School Principal (0.61)	Good teacher (0.41)	Good student (0.60)
weak reachers	Person I admire (0.58)	Good Student (0.38)	School Principal (0.49)
	Disruptive student (0.56)	School Principal (0.36)	Artists today (0.43)
	Artists today (0.56)		
	Politicians today (0.49)		
	Person I admire (0.60)	Good teacher (0.73)	Good student (0.76)
	School principal (0.53)	Good student (0.73)	Good teacher (0.69)
A * 10mo 00	Closest family member	Person I admire (0.66)	Closest family member
Average Teachers	(0.51)	Closest family member	(0.69)
reachers	Good student (0.49)	(0.65)	Person I admire (0.68)
	Good teacher (0.45)	Politicians today (0.62)	Politicians today (0.65)
	Artists today (0.44)	School Principal (0.56)	

	Politicians today (0.43)	Artists today (0.49)	
	D I 1 : (0.70)	C 1, 1 (0.70)	G 1, 1 (0.00)
	Person I admire (0.78)	Good teacher (0.78)	Good teacher (0.80)
	A good teacher (0.76)	Person I admire (0.75)	Person I admire (0.74)
	School Principal (0.65)		School principal 0.70)
Good Teachers	Closest family member	School Principal (0.69)	Closest family member
Good Teachers	(0.63)	Closest family member	(0.68)
		(0.66)	Good student (0.67)
		Good student (0.64)	
		Artists today (0.64)	

## Potential action points for PD

Table 5 reports significant and moderate empathetic identifications for the weak, average and good teachers. In the case of weak teachers, significant empathetic identification is present in the home with the entities, closest family member, a good teacher and a good student. In the past, closest family member is again an object of significant empathetic identification. Interestingly, the entities 'a person I admire' and 'politicians today' are moderately influential in present times in both the home and at work but they were not influential in the past. The suggestion is that the weak teachers have become more sensitive to politics as they have aged. Questioning to determine whether the influence of politicians today is positive or negative might be worthy of investigation in PD sessions. In the workplace, the empathetic identification pattern with the good teacher and the good student is only moderate in strength. In fact, all empathetic identification in work today for the weak teachers is of moderate strength. Shifts in empathetic identification from the past to the present and from work to home point to potential for the weak teachers to engage in changes in behaviour as they move across these domains. Here again, questioning to uncover the source of this potential for change is warranted. For example, ask if something at work is preventing them from behaving like a good teacher to the degree that they feel they do in the home.

For the average teachers there is moderate empathetic identification with a person I admire at home and in both time frames at work. There are no significant empathetic identifications in the home. At work empathetic identification with the good teacher and good student entities is moderate to borderline high. In the past only the good student presented with (borderline) high empathetic identification. Here, shifts in empathetic identification suggest some potential for change in behaviour across the domains of the instrument with the point of greatest note being the average teachers' tendency to feel more 'as' a good teacher and good student in the workplace. This is a positive finding that does not point to a *need* for ameliorative PD. However, it may be worth questioning the teachers to determine why they feel their behaviours change. With this information gleaned it may then be put to good use.

The good teachers' empathetic identification pattern is similar in all domains of the instrument. The point of greatest note is that there is borderline high empathetic identification with the good teacher and the person I admire entities at home and at work both now and in the past. All other noted empathetic identifications are moderately high and of similar strength regardless of domain. What you see is what you get with these teachers. That is, they are likely to behave in

similar ways regardless of the domain they happen to be in. This finding serves as favourable comparison to the average and weak teachers where potential for change in behaviour was noted.

## Conflicted identifications with others

Conflicted Identification: minimum value = 0.00, maximum value = 1.00

Conflicted identification in ISA references the combination of contra- and empathetic identification with significant others; being 'as' another while at the same time wishing to disassociate from those characteristics that are seen to be held in common.

#### For the weak teacher:

Current identification-conflicts based in 'me at home' are: closest family member (0.49), a disruptive student (0.43), a person I do not like (0.38).

Current identification-conflict based in 'me at work' are: none.

Past identification-conflict based in 'me, as a student teacher' are: closest family member (0.48), a person I do not like (0.48), disruptive student (0.48).

Significant conflicted identification for the weak teachers begins at the 0.44 level. In the home only the closest family member presents as a significant conflicted identification. This pattern was also present in the past at work. The same entities (a person I do not like and a disruptive student) present as borderline high conflicted identifications in the home and as significant conflicted identifications in the past. Interestingly, there are no significant conflicted identifications at work which suggests that problems in the home and in the past have been overcome at work in present times. This being the case, an administrator need not feel obliged to spend monies to overcome the known conflicts of identification for the weak teachers. That said, for the sake of interest, the characteristics of the closest family member and a disruptive student that cause problems (the characteristics that present with negative raw scores for me at work and for the entity of interest) in the home and in the past will be considered. At issue for my closest family member is the perception that this entity deals with people straightforwardly and tends to communicate well with people. For the disruptive student, only the characteristic of dealing with people straightforwardly is at issue. Given the conflicted construct status of 'is straightforward with people vs plays games with people' should administration decide to pursue PD for conflicted identification, uncovering the cause of any stresses this construct invokes might be worthwhile.

## *For the average teacher:*

Current identification-conflicts based in 'me at home' are: school principal (0.38), a person I do not like (0.37).

Current identification-conflict based in 'me at work 'are: a good student (0.41), a person I do not like (0.40), a disruptive student (0.39) politicians today (0.39), school principal (0.38), scientists today (0.38).

Past identification-conflict based in 'me, as a student teacher' are: a person I do not like (0.45), politicians today (0.40), scientists today (0.38), my closest family member (0.37).

Regarding the average teacher, significant conflicted identification begins at the 0.51 level. Thus, no significant conflicted identifications are present for the average teacher. However, moderate conflicted identifications exist in all 3 domains of the instrument. Given the moderate nature of the average teachers' conflicted identification pattern, it is probably the case that PD to overcome them will not be required.

## *For the good teacher:*

Current identification-conflicts based in 'me at home' are: a disruptive student (0.41), politicians today (0.37), scientists today (0.36), artists today (0.34).

Current identification-conflict based in 'me at work 'are: a disruptive student (0.44) scientists today (0.41), politicians today (0.40), artists today (0.37).

Past identification-conflict based in 'me, as a student teacher' are: a disruptive student (0.43), scientists today (0.40), politicians today (0.40).

For good teachers significant conflicted identification begins at the 0.52 level. No significant conflicted identifications present for these teachers. There is moderate workplace-related conflicted identification with the disruptive student. To investigate raw scores and conflicted identification troublesome characteristics are the constructs whose raw scores for the entities in question lie toward the negatively rated pole. For the good teacher and the disruptive student no constructs are so scored. However, the constructs of dealing straightforwardly with people vs playing games with them and depending on others in making decisions vs prefers to work things out alone did score at zero. Both these constructs are conflicted for the good teachers and as such they may offer interesting starting points for PD should an administrator decide to provide PD to improve the professional identities of the good teachers.

## Evaluation of, and ego-involvement with others

Evaluation minimum value = -1.00, maximum value = +1.00Ego-involvement minimum value = 0.00, maximum value = 5.00

Evaluation of others refers to a summation of the positive and negative scores associated with each entity. Entities as a result can have a positive or negative value for this parameter.

Ego involvement refers to the overall responsiveness to an entity in terms of the extensiveness in quantity (number of characteristics possessed) and strength (where the rating of each characteristic lies along the zero-center scale) of the attributes they are rated as possessing.

Entities of primary investigative interest for the weak teacher: Closest family member (evaluation of 0.32) (ego-involvement: 4.18). A good teacher (evaluation of 0.54) (ego-involvement: 4.10).

A person I admire (evaluation of 0.65) (ego-involvement: 3.96).

A good student (evaluation of 0.42) (ego: 4.12).

A disruptive student (evaluation of -0.04) (ego: 3.96).

A person I do not like (evaluation of -0.20) (ego: 4.59).

For the weak teachers' evaluation of a person I admire is borderline high. There is moderate evaluation of a good teacher, a good student, and closest family member. Low (negative) evaluation is reserved for a disruptive student and a person I do not like. There is high ego-involvement with a person I do not like and borderline high ego-involvement with closest family member, a good teacher and a good student. Lowest (still moderate) ego-involvement is associated with the negatively evaluated disruptive student. The higher ego-involvement with a person I do not like suggests the weak teachers will be more motivated to avoid behaving as this entity is perceived to behave than they will be motivated to behave as per the perceived behaviours of the favourably evaluated good teacher.

*Entities of primary investigative interest for the average teacher:* 

Closest family member (evaluation of 0.28) (ego-involvement: 2.74).

A good teacher (evaluation of 0.46) (ego-involvement: 3.04).

A person I admire (evaluation of 0.34) (ego-involvement: 3.18).

A good student (evaluation of 0.28) (ego: 3.57).

The school principal (evaluation of 0.22) (ego involvement 3.19).

A person I do not like (evaluation of -0.47) (ego: 4.23).

The average teachers evaluate the good teacher and a person I admire the highest and a good student, closest family member, and the school principal higher than a person I do not like. Ego-involvement is moderate for all the entities of primary interest other than a person I do not like which is borderline high. Behaviours associated with a person I do not like will be more impactful for the average teachers and as such they will strive to avoid these behaviours to a greater degree than they will try to behave as the more admired entities.

*Entities of primary investigative interest for the good teacher:* 

Closest family member (evaluation of 0.39) (ego-involvement: 2.98).

A good teacher (evaluation of 0.59) (ego-involvement: 3.25).

A good student (evaluation of 0.38) (ego: 2.85).

Typical politicians today (evaluation of -0.14) (ego: 3.54).

Typical scientists today (evaluation of 0.23) (ego: 3.60).

A disruptive student (evaluation of -0.06) (ego: 3.58).

For the good teacher highest evaluation is reserved for the good teacher but this rating, like the ratings for all the other principal entities of interest is moderate. Ego-involvement with a disruptive student is highest but, like the ego-involvement associated with all the entities of interest, it is moderate.

## Evaluation of self, extent of identity diffusion, and identity variant.

Self-evaluation: minimum value = -1.00, maximum value = 1.00

Identity Diffusion: minimum value = 0.00, maximum value = 1.00

Self-evaluation refers to measurements wherein characteristics associated with the various entities of self (me as I was, me as I am) are compared to characteristics associated with the ideal aspirational self (me as I would like to be). They can be positive or negative in value.

Identity diffusion in ISA is a measure of the extent of a person's conflicts of identification.

Identity variants in ISA are reported in a table that places the various entities of self within an identity variant category according to their combination of self-evaluation and diffusion. A snapshot of the status of an identity is available from the sections where the entities of self are found to lie. The central identity variant (indeterminate) is considered optimal. Interpreting the table requires consideration of where and how the entities of self are different from the optimal placement.

Figure 1
Classification of identity variants

Defensive High Self-Regard	Confident	Diffuse High Self-Regard
Defensive	Indeterminate	Diffusion
Defensive Negative	Negative	Crisis

**Table 6** *Identity variants of weak/average, average and good teachers* 

Entity	Parameter	Weak	Average	Good
	Self-evaluation	0.57	0.30	0.48
Me at Home	Identity	0.38	0.32	0.31
We at Home	Diffusion			
	Variant	Indeterminate	Indeterminate	Indeterminate
	Self-evaluation	0.44	0.33	0.45
Me at Work	Identity	0.24	0.38	0.33
We at Work	Diffusion			
	Variant	Defensive	Indeterminate	Indeterminate
	Self-evaluation	-0.06	0.34	0.46
Student	Identity	0.38	0.39	0.33
Teacher	Diffusion			
	Variant	Negative	Indeterminate	Indeterminate
	Self-evaluation	0.98	0.89	0.77
Me Like to Be	Identity	0.32	0.32	0.24
We Like to be	Diffusion			
	Variant	Confident	Confident	Defensive/Indeterminate
	Self-evaluation	-0.86	-0.55	-0.62
Me Hate to Be	Identity	0.29	0.42	0.49
ме пан но ве	Diffusion			
	Variant	Negative	Negative/Crisis	Crisis

For the weak teacher the entities me as I would hate to be and me as a student teacher lie in the negative section of Figure 1. Fortunately, me at work is associated with higher levels of selfevaluation. It is in the defensive section and close to bordering the indeterminate section. Higher levels of self-evaluation in present times suggests that the weak teachers feel they are moving toward their goals in the workplace which is a positive finding. Most likely the defensive rating for me at work does not pose a significant problem as this entity of self lies near the border of the indeterminate section of Figure 1. However, PD might be directed toward a conversation around the construct 'is straightforward with people vs plays games with people' as it was at issue for these teachers in the case of conflicted identifications with the disruptive student. Moving the weak teachers toward recognition of a conflict of identification around this construct may help them better reach the disruptive student; an entity with whom they contra-identify. Once so moved the weak teachers might enter the indeterminate section of Figure 1 in the case of me at work. The entity 'me as I would like to be' is associated with unreasonably high levels of self-evaluation. PD to temper expectations for future performance in the classroom is recommended. Mentoring can support self-efficacy and encourage self-evaluation (Day & Allen, 2004), providing mentees a safe environment to explore and evaluate (Hayden, 2006) and build their confidence (Anderson, 2005).

The work-related entities of self of the average teachers lie in the desired indeterminate section of Figure 1 as does the entity me at home. 'Me as I would like to be' is in the confident sector of the Figure as was the case for the weak teachers. For the average (and indeed for the weak teachers) teachers, mentoring to temper expectations for future performance is

recommended. Interestingly, me as I would hate to be lies on the border of the negative and crisis sections of Figure 1. A two-pronged approach to mentoring may improve this finding. First, try mentoring the average teachers toward greater empathy for the disruptive student. This action may reduce the level of diffusion felt by me as I would hate to be. Second, work to help these teachers come to better accept the behaviours they perceive as negative when they act out of character. Doing so may increase self-evaluation for this entity of self.

All work-related entities of self for the good teacher lie in the indeterminate section of Figure 1. Me at home is also indeterminate. Me as I would like to be is associated with self-evaluation that is borderline too high. Mentoring to overcome the latter finding may not be required as a higher self-evaluation for me as I would like to be is to be expected if most things are falling into place for an identity. Once again, 'me as I would hate to be' is in crisis. Focus PD around the entity a disruptive student (the workplace related target of conflicted identification). Question the teachers about issues they have with the constructs of dealing straightforwardly with people vs playing games with them and depending on others in making decisions vs prefers to work things out alone.

### **Concluding Remarks**

With the above analyses complete it is time to turn to answering the questions posed in this study. The ISA analyses suggest that Weinreich's template might be able to differentiate amongst groups of weak, average and good teachers. They further indicate that group-ISA analyses might prove useful for guiding the development of professional development in that they may uncover information that may be new to the teachers and their administrators or that they point to and reinforce information that is already available to these parties. It is suggested that summaries of ISA analyses for groups (and indeed individual faculty) as presented below could serve as useful format for guides to the development of PD.

#### Weak teachers

The weak teachers' professional identity is focused on 3 core concepts: dealing with awkward people by appealing to everyday rules, feeling there is a lot they can do to get students to value learning, and prioritizing achievement. These constructs concern the teachers' approach to classroom management and teaching. There are 2 conflicted constructs: being straightforward with people or playing games with them and the issue of communications with parents. The latter construct is of maximal emotional significance and it lies in the approach to teaching and classroom management theme. Playing games or being straightforward with people is of moderate emotional significance so the teachers may not see it as a troublesome arena. To tackle the primary conflicted construct, ask the teaches how they see parental communications impacting their ability to manage and teach a class. Alternately, hold meetings where the teachers can form plans for dealing with uncertainties around this conflicted construct. Another approach to garnering information for PD is to ask a question that links a conflicted construct to another that is core. Doing so will provide the teachers with more to think about than the issues that generally invade

their thinking. In this case ask the teachers to consider how playing games with people might impact their ability to get students to value learning.

Long-term aspirant behaviours for the weak teachers' concern dealing with difficulties creatively, feeling there is a lot they can get students to value learning, dealing with awkward people by appealing to everyday rules, siding with the disadvantaged in society and, putting the needs of students first. PD toward these behaviours would likely receive a warm welcome. Focus such PD particularly on the core constructs 'feel there is a lot they can do to get students to value learning' and 'dealing with awkward people by way of everyday rules'.

To help the weak teacher better reach disruptive students help them see why this entity may struggle with: being selfish, and confrontational, being concerned with their own welfare, being more inclined to depend on others in decision making and more likely to feel there is little the teachers can do to get students to value learning. Focus mentoring here on the core constructs: why the disruptive student might think there is little they can do to get them to value learning and why these students might confront awkward people.

There are shifts in empathetic identification pattern across the domains of the instrument. The weak teachers feel most 'as' closest family member, a good teacher, and a good student in the home. In the past they similarly felt like their closest family member but empathetic identification with the good teacher and the good student was to a lesser degree. All empathetic identification in work today is of moderate strength. Shifts in empathetic identification point to potential for changes in behaviour. Questioning to uncover the source of the potential for change may be warranted. Note 'politicians today' are moderately influential in present times but such was are not the case in the past. Whether the influence of politicians today is positive or negative may be worthy of investigation.

Only the closest family member entity offers a significant conflicted identification. This issue is present in the home and it was present in the past at work. No significant conflicted identifications are at play in the workplace suggesting that problems at home and problems in the past have been overcome at work. At issue for my closest family member is the perception that this entity deals with people straightforwardly and tends to communicate well with people. Given the conflicted construct status of 'is straightforward with people vs plays games with people' mentoring to uncover the causes of any stress associated with this construct might be worthwhile.

Me as I would hate to be and me as a student teacher are negative identity variants for these teachers. Me at work is defensive which is not ideal, but it does have higher levels of self-evaluation than me as a student teacher suggesting that the weak teachers feel they are moving toward their goals in the workplace. To improve the defensive rating for me at work try questioning around the construct 'is straightforward with people vs plays games with people'. Moving the weak teachers toward recognition of an identification conflict around this construct may help them better reach the disruptive student. The high self-evaluation of 'me as I would like to be' implies that PD to temper expectations for future performance in the classroom is required.

#### Average Teachers

Only communicating well with parents is truly core for the average teachers. Remaining 'core' constructs (putting the needs of students first, becoming closely involved with students and dealing

with awkward people by appealing to everyday rules) are of secondary core status. Two themes dominate: relationship with students (puts the needs of students first and becomes closely involved with students) and approach to classroom management and teaching (communications with parents and approach to dealing with awkward people). There is only one conflicted construct; prioritizes achievement vs prioritizes welfare. It is part of the approach to classroom management and teaching theme. To gain information for PD ask them when they struggle over whether to prioritize the welfare of students or whether to prioritize academic achievement. As per the weak teachers, consider holding meetings where the teachers can form plans for tackling this construct. To link a conflicted construct to one that is core ask about circumstances where prioritizing achievement (or welfare) necessarily results in poor communication with parents.

Helping these teachers communicate more effectively with parents and to more often side with the advantaged in society may see them better reach long-term behavioural aspirations. Focus PD upon communications with parents which is a core construct. The average teachers contraidentify with the disruptive student who, relative to the good student is seen to: engage in better parental communications, feel there is a lot these teachers can do to get them to value learning, deal with awkward people by appealing to everyday rules, side with the advantaged in society, put the needs of students first, become closely involved with students, deal with problems creatively and feel that there is no better job than teaching. Helping the average teachers better empathize with these perceived behaviours could help them better reach disruptive students, raise their performance, and thus raise the performance of their schools.

The average teachers' empathetic identification pattern turns up some potential for behavioural shift across the domains of the instrument with the point of greatest note being their tendency to feel more 'as' a good teacher and a good student in the workplace than elsewhere. No significant conflicted identifications were uncovered in the case of the average teachers and PD to help them overcome the moderate conflicted identifications that are seen is not recommended.

The work-related entities of self of the average teachers lie in the desired indeterminate section of Figure 1 as does the entity me at home. 'Me as I would like to be' is in the confident sector of Figure 1 as per the weak teachers. Mentoring to temper future performance expectations may be required. Me as I would hate to be lies on the border of the negative and crisis. PD toward greater empathy for the disruptive student may reduce the level of diffusion associated with this entity of self and helping these teachers accept the negative behaviours they see in self when they act out of character may also raise the self-evaluation of this entity.

#### **Good Teachers**

Like the average teachers the good teachers exhibit no constructs that are truly core. Favoured poles of secondary core constructs nonetheless point to behaviours the good teachers will most frequently adopt. Two themes are represented; approach to classroom management and teaching (feel there is a lot I can do to get students to value learning, communicates well with parents) and relationship with students (puts the needs of students first, becomes closely involved with students, sides with society's disadvantaged).

The good teachers exhibit more conflicted constructs than the average and weak teachers. Approach to classroom management and teaching (deal with awkward people by appealing to

everyday rules, prioritize achievement), team player (believe there is no finer job than teaching, take issue with the way things are, and, play games with people), relationship with students (sides with the disadvantaged in society), and, approach to problem solving (prefers to work things out alone, deals with difficulties creatively). These constructs represent all 4 themes of the instrument. Ascertaining whether to deal with people straightforwardly or by playing games with them is the most stressed of the conflicted constructs. To tackle the good teachers' conflicted constructs question them to uncover the source of their stress. For example, ask them when they struggle over dealing with people straightforwardly or playing games with them. An example question linking conflicted and core constructs would be to ask about scenarios where playing games with people may impede their ability to become closely involved with their students.

An aspirant behaviour for the good teachers concerns feeling there is a lot they can do to get students to value learning. PD toward greater exhibition of this behaviour is recommended. A target of contra-identification is the 'disruptive student' who is seen to communicate poorly with parents, feel there is little they can do to get them to value learning, be confrontational with awkward people, put personal needs first and believe that there are better jobs than teaching. Helping the teachers see why the disruptive student might struggle in these areas may increase empathy for them.

The good teachers' empathetic identification pattern is similar in all domains of the instrument. That is, they are likely to behave in similar ways regardless of the domain they happen to be in. The work-related entity of self and me at home are 'of' the indeterminate identity variant. Me as I would like to be is borderline high. Mentoring to overcome this finding may not be required (a higher self-evaluation rating for me as I would like to be is to be expected). Me as I would hate to be is in crisis. To improve this finding focus PD on the entity a disruptive student (target of conflicted identification). To that end, question the teachers about issues they have with dealing straightforwardly with people vs playing games with them and depending on others in making decisions vs prefers to work things out alone.

#### **Implications and future research directions**

Beyond illustrating that differentiation among weak, average and good teachers may be possible with ISA analysis, the depth of information provided in the summaries also illustrates that they could be provided to educators, to guide the development of PD such that stresses felt by weak (and average and good teachers) might be mitigated to the extent that effectiveness in the classroom increases. However, confirmation of this reasoning is contingent on future workers performing larger studies that make use of raw scores. Larger studies are also required to confirm that nomothetic analyses can provide for core constructs of more than secondary structural pressure. That said, this study did turn up differences amongst the different groups of teachers and two findings are particularly worthy of note. First the weak teachers core constructs were concentrated in the approach to classroom management and teaching theme. Whilst the same theme appeared in the 'core' constructs of the average and good teachers it did so alongside relationship with students. If larger studies confirm that approach to classroom management and teaching dominates the thinking of weak teachers, it may be that this proves to be an arena where administrators can focus PD to improve their effectiveness. Second, compared to the weak and

average teachers, the good teachers exhibited a stable empathetic identification pattern across the domains of the teacher identity instrument. Larger studies may reveal that political issues are limiting the weak teachers' effectiveness in the workplace; they may also point to paths that PD can adopt to facilitate greater empathetic identification with the good teacher in the classroom.

#### References

- Anderson, D. R. (2005). The importance of mentoring programs to women's career development in biotechnology. *Journal of Career Development*, *32*(1), 60–73. https://doi.org/10.1177/0894845305277039
- Alsup, J. (2005). *Teacher identity discourses: Negotiating personal and professional spaces*. Lawrence Erlbaum Associates.
- Barker, E. R. (2006). Mentoring. A complex relationship. *Journal of the American Academy of Nurse Practitioners*, 18(2), 56–61. https://doi.org/10.1111/j.1745-7599.2006.00102.x
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2), 107–128. https://www.doi.org/10.1016/j.tate.2003.07.001
- Bieler, D. (2013). Strengthening new teacher agency through holistic mentoring. *English Journal*, 102(3), 23–32.
- Burchinal, M., Vandergrift, N., Pianta, R., & Mashburn, A. (2010). Threshold analysis of association between child care quality and child outcomes for low-income children in pre-kindergarten programs. *Early Childhood Research Quarterly*, 25(2), 166–176. https://doi.org/10.1016/j.ecresq.2009.10.004
- Buettner, C. K., Jeon, L., Hur, E., & Garcia, R. E. (2016). Teachers' social–emotional capacity: Factors associated with teachers' responsiveness and professional commitment. *Early Education and Development*, 27(7), 1018–1039. https://doi.org/10.1080/10409289.2016.1168227
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. *Education Policy Analysis Archives*, 27(36). http://dx.doi.org/10.14507/epaa.27.3699
- Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology*, 28, 195–209. https://doi.org/10.108/01443410701491858
- Charters, W. W. (1956). Survival in the profession: A criterion for selecting teacher trainees. *The Journal of Teacher Education*, 7(3), 253–255. https://doi.org/10.1177/002248715600700314
- Charters, W. W. (1970). Some factors affecting teacher survival in school districts. *American Educational Research Journal*, 7(1), 1–27. https://doi.org/10.3102/00028312007001001
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, *104*(4), 1189–1204. https://doi.org/10.1037/a0029356
- Day, R., & Allen, T. D. (2004). The relationship between career motivation and self-efficacy with protégé career success. *Journal of Vocational Behaviour*, 64(1), 72–91. https://doi.org/10.1016/S0001-8791(03)00036-8
- DeAngelis, K. J., & Presley, J. B. (2011). Toward a more nuanced understanding of new teacher attrition. *Education and Urban Society*, 43(5), 598–626. https://doi.org/10.1177/0013124510380724
- European Commission. (2013). Study on policy measures to improve the attractiveness of the teaching profession in Europe. Publications Office of the European Union.
- Federicova, M. (2021). Teacher turnover: What can we learn from Europe? *European Journal of Education: Research, Development and Policy, 56*(1), 102–116. https://doi.org/10.1111/ejed.12429

- Friesen, M. D., & Besley, S. C. (2013). Teacher identity development in the first year of teacher education: A developmental and social psychological perspective. *Teaching and Teacher Education*, *36*, 23–32. https://doi.org/10.1016/j.tate.2013.06.005
- Goldhaber, D. (2007). Everybody's doing it, but what does teacher testing tell us about teacher effectiveness? *Journal of Human Resources*, 42(4), 765–794. https://doi.org/10.3368/jhr.XLII.4.765
- Hamre, B. K. (2014). Teachers' daily interactions with children: An essential ingredient in effective early childhood programs. *Child Development Perspectives*, 8(4), 223–230. https://doi.org/10.1111/cdep.12090
- Hayden, J. (2006). Mentoring: Help with climbing the career ladder. *Health Promotion Practice*, 7(3), 289–292. https://doi.org/10.1177/1524839906289269
- Heck, R. H. (2007). Examining the relationship between teacher quality as an organizational property of schools and students' achievement and growth rates. *Educational Administration Quarterly*, 43(4), 399–432. https://doi.org/10.1177/0013161X07306452
- Henry, G. T., & Redding, C. (2020). The consequences of leaving school early: The effects of within-year and end-of-year teacher turnover. *Education Finance and Policy*, *15*(2), 332–356. https://doi.org/10.1162/edfp\_a\_00274
- Ingersoll, R. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, *38*(3), 499–534. https://doi.org/10.3102/00028312038003499
- Ingersoll, R., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30–33.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525. https://doi.org/10.3102/0034654308325693
- Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). Who stays in teaching and why: A review of the literature on teacher retention? NRTA's Educator Support Network.
- Katsarova, I. (2020). *Teaching careers in the EU. Why boys do not want to be teachers*. European Parliamentary Research Service.
- Kirby, S. N., & Grissmer, D. W. (1993, June 28–July 2). *Teacher attrition: Theory, evidence, and suggested policy options*. [Conference presentation]. World Bank/Harvard Institute for International Development Seminar on 'Policies Affecting Learning Outcomes Through Impacts on Teachers.' Cambridge, MA.
- Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and preservice teachers: Influences of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology*, *36*, 114–129. http://dx.doi.org/10.1016/j.cedpsych.2011.01.002
- Kram, K. E. (1985). *Mentoring at work: Development relationships in organisational life*. Scott Foresman. Lachman, R., & Diamant, E. (1987). Withdrawal and restraining factors in teachers' turnover intentions. *Journal of Occupational Behaviour*, 8(3), 219–232. https://doi.org/10.1002/job.4030080304
- Lamote, C., & Engels, N. (2010). The development of student teachers' professional identity. *European Journal of Teacher Education*, *33*(1), 3–18. https://doi.org/10.1080/02619760903457735
- Lazarus, R. S. (2006). Emotions and interpersonal relationships: Toward a person-centered conceptualization of emotions and coping. *Journal of Personality*, 74(1), 9–46. https://doi.org/10.1111/j.1467-6494.2005.00368.x
- Luekens, M. T., Lyter, D. M., Fox, E. E., & Chandler, K. (2004). *Teacher attrition and mobility: Results from the Teacher Follow-up Survey*, 2000-01. National Center for Education Statistics.
- Mark, J. H., & Anderson, B. D. (1978). Teacher survival rates: A current look. *American Educational Research Journal*, 15(3), 379–383. https://doi.org/10.3102/00028312015003379

- Mark, J. H., & Anderson, B. D. (1985). Teacher survival rates in St Louis, 1969–1982. *American Educational Research Journal*, 22(3), 413–421. https://doi.org/10.3102/00028312022003413
- Meijer, P. C., de Graaf, G., & Meirink, J. (2011). Key experiences in student teacher's development. *Teachers and Teaching: Theory and Practice, 17*(1), 115–129. https://doi.org/10.1080/13540602.2011.538502
- Murnane, R. J., & Phillips, B. (1981). Learning by doing, vintage, and selection: Three pieces of the puzzle relating teaching experience and teaching performance. *Economics of Education Review*, 1(4), 453–465.
- National Commission on Teaching and America's Future. (2003). *No dream denied: A pledge to America's children: Summary report.* National Commission on Teaching and America's Future.
- Passmore, G., Ellis, R., & Hogard, E. (2014). *Measuring identity: A review of published studies*. Buckinghamshire New University Press.
- Passmore, G., & Prescott, J. (2022). *Using an ISA mobile app for professional development*. Springer Nature.
- Peisner-Feinberg, E. S., Burchinal, M. R., Clifford, R. M., Culkin, M. L., Howes, C., Kagan, S. L., & Yazejian, N. (2001). The relation of preschool child-care quality to children's cognitive and social developmental trajectories through second grade. *Child Development*, 72(5), 1534–1553. https://doi.org/10.1111/1467-8624.00364
- Räsänen, K., Pietarinen, J., Pyhältö, K., Soini, T., & Väisänen, P. (2020). Why leave the teaching profession? A longitudinal approach to the prevalence and persistence of teacher turnover intentions. *Social Psychology of Education*, 23, 837–859. https://doi.org/10.1007/s11218-020-09567-x
- Redding, C., & Henry, G. T. (2019). Leaving school early: An examination of novice teachers' within- and end-of-year turnover. *American Educational Research Journal*, 56(1), 204–236. https://doi.org/10.3102/0002831218790542
- Simon, N., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record*, 117(3), 1–36. https://doi.org/10.1177/016146811511700305
- Weinreich, P. (2003). Identity Structure Analysis. In P. Weinreich, & W. Saunderson (Eds.), *Analysing identity: Cross-cultural, societal and clinical contexts* (pp. 7–76). Routledge.
- Zinsser, K. M., Bailey, C. S., Curby, T. W., Denham, S. A., & Bassett, H. H. (2013). Exploring the predictable classroom: Preschool teacher stress, emotional supportiveness, and students' social emotional behavior in private and Head Start classrooms. *NHSA Dialog: The Research-to-Practice Journal for the Early Childhood Field*, *16*(2), 90–108.

## **Appendices**

## **Appendix 1** *Entities in the teacher instrument*

Domain	Label	Classification
	Me, as I would like to be	Ideal Self
	Me, as I would hate to be	Contra Ideal Self
Mandatory Entities of Self	Me at work	Current Self
	Me, as I am at home	Current Self
	Me as a student teacher	Past self
Home Entities	My closest family member	

A good teacher
A good student
A disruptive student
School Principal
Typical Politicians Today
Typical Scientists Today
Typical Artists Today
A person I admire
A person I do not like

## Appendix 2 Constructs in the teacher instrument

Theme	Left Label	Right Label
	is straightforward with people	plays games with people
Team Player	takes issue with the way things are	supports the way things are
Team Flayer	believes there is no finer job than teaching	believes there are better jobs than teaching
	prioritizes achievement	prioritizes welfare
Approach to Class	feel there is a lot I can do to get students to value learning	feel there is little I can do to get students to value learning
Management and Teaching	deals with awkward people by appealing to everyday rules	confronts awkward people
	communicates well with parents	is remote from parents
	sides with society's disadvantaged	sides with the advantaged in society
Relationship with students	puts the needs of students first becomes closely involved with students	puts personal needs first maintains a formal relationship
Approach to Problem	depends on others in making decisions	prefers to work things out alone
Solving	follows a firm agenda when dealing with difficulties	deals with difficulties creatively