Alberta Journal of Educational Research, Vol. 65.3, Fall 2019, 180-204

Conceptualizing a Personalized Identity-Focused Approach to Teacher Professional Development: Postulating the Realization of Reform

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Identity structure analysis (ISA) reveals core and conflicted identity constructs, long-term aspirant goals for behaviours, behaviours one wishes to avoid, potential for behaviour change when moving from one life domain to another, and people that are the subject of identity conflicts. In this work, ISA is applied to a teacher's identity to form a framework to guide professional development. A rationale for use of the ISA framework is developed that connects it to calls for reform in professional development.

L'analyse de structure identitaire (ASI) révèle des constructions identitaires fondamentales et divergentes; des objectifs à long-terme relatifs au comportement; des comportements que l'individu désire éviter; le potentiel pour un changement comportemental lors du mouvement d'une sphère de la vie à une autre; et des gens qui vivent des conflits identitaires. Cet article porte sur l'application de l'ASI à l'identité d'un enseignant de sorte à fournir un cadre pour guider le développement professionnel. Nous développons un motif pour l'utilisation du cadre d'ASI qui le lie aux demandes pour des réformes dans le domaine du développement professionnel.

According to Lasky (2005), "Teacher professional identity is how teachers define themselves to themselves and to others" (p. 901). Belying the simplicity of this definition, teacher professional identity is a complex construct (Sachs, 2005) whose multi-facets are fundamental to explaining how teachers make sense of themselves and their work as educators. It is the result of a dynamic, fluid process in which contextual factors are negotiated and experiences are interpreted (Beauchamp & Thomas, 2009; Beijaard, Meijer, & Verloop, 2004; Henry, 2016; Sachs, 2005). Identity then is a representation of "the collection of influences and effects … that become intertwined inside the flow of activity as a teacher simultaneously reacts to and negotiates with given contexts and human relationships" (Olsen, 2008, p. 139). In other words, identity's shifting nature results from it being "shaped and reshaped in interaction with others in a professional context" (Beauchamp & Thomas, 2009, p. 178). These descriptions of identity are aligned with the definition provided by Weinreich and Saunderson (2003) in their discussion of identity structure analysis (ISA):

> A person's identity is defined as the totality of one's self-construal, in which how one construes oneself in the present expresses the continuity between how one construes oneself as one was in the past and how one construes oneself as one aspires to be in the future. (p. 26)

To Weinreich and Saunderson, ethnic, racial and gender identity pertain to particular parts of the totality of one's construal of self. That being the case, we hold that teacher professional identity in ISA is that part of the totality of one's self-understanding that expresses the continuity between past, present, and future construal of self in relation to the professional work of teaching.

In a review of teacher identity research Beijaard, Meijer, and Verloop (2004) reported that Knowles (1992) and Nias (1989) related professional identity to images of self, while Goodson and Cole (1994), Volkmann and Anderson (1998), and Cooper and Olson (1996) placed emphasis on teacher roles. In regard to the measurement of teacher roles, Beijaard et al. (2004) suggested that four characteristics were of import: commitment to teaching, professional orientation, task orientation, and self-efficacy. On applying scales to the measurement of these characteristics, Lamote and Engels (2010), and Rots, Aelterman, Vlerick, and Vermeulen (2007) were able to successfully distinguish among higher, median, and lower teacher ratings. Despite this significant step forward, researchers call for greater differentiation among teacher identity with a scale that is sensitive to processes and factors that influence identity formation such as the continuous evaluation and re-evaluation of experiences (Kerby, 1991), social context and concepts of self (Beijaard et al., 2004), and personal history and culture (Lamote & Engels, 2010).

While the literature on teaching emphasizes the significance of identity in teacher development, it is unclear if or how this recognition has explicitly informed the design of professional development initiatives. Despite rhetoric calling for a more progressive approach to teacher professional development, traditional strategies that reflect a one-size-fits-all orientation persist and thrive (Burnham, 2015; Lieberman, 1995; Yendol-Hoppey & Dana, 2010). Observing the dominance of training options, Little (1993) noted the prevalence of "workshop series, special courses, or in-service days devoted to transmitting some specific set of ideas, practices, or materials to teachers" (p. 133). Although we acknowledge that many innovative and progressive approaches to professional development are being deployed in schools, we are concerned that traditional delivery models still persist. Like Girvan, Conneely, and Tangney (2016), we are concerned that "new ideas and practices are still presented to teachers using traditional approaches such as transmission of information and observation of 'expert teachers' with experienced classes, which does not attend to the personal nature of professional development" (p. 130). This is particularly troubling, for if we fail to understand professional development as a personalized endeavour we could potentially undermine reform efforts that call for a systemic change in teacher practices.

Little (1993) characterizes this as a "problem of fit between the task of reform and the prevailing models of professional development" (p. 139). The issue being that the prevailing (traditional) approaches to professional development often place more emphasis on knowledge transmission and consumption than on knowledge creation and construction. Consequently, teachers can find themselves in professional development experiences that are more passive than active. Quiroz and Secada (2003) underline this concern by suggesting that although professional development is now accepted as a critical component of school reform, "teachers

remain largely defined as recipients of professional development rather than as partners who bring knowledge, skills, and experience to this process" (p. 88). Echoing this sentiment, Timperlay (2011) aptly notes that the phrase professional development has, over time, adopted connotations of delivery of information to teachers. Timperlay (2011) suggests that we need to start thinking about professional development in terms of professional learning, thus allowing an emphasis to be placed on the "internal process in which individuals create professional knowledge" (p. 5). Connecting this idea with the notion of reform, Mokhele (2015) suggests that professional development that focuses on teachers' individual personal transformation and growth is most likely to result in reform-oriented change.

According to Mokhele (2015), "reform requires that teachers learn new roles and ways of teaching that translate into long-term developmental processes which require them to focus on changing their own practices" (p. 108). This is a view shared by the authors of the current article. We understand the dominant transmission or delivery models of professional development to be deeply problematic as they communicate

> … a relatively impoverished view of teachers, teaching, and teacher development. Compared with the complexity, subtlety, and uncertainties of the classroom, professional development is often a remarkably low-intensity enterprise. It requires little in the way of intellectual struggle or emotional engagement and takes only superficial account of teachers' histories or circumstances. Compared with the complexity and ambiguity of the most ambitious reforms, professional development is too often substantively weak and politically marginal. (Little, 1993, p. 148)

The troubling insinuation here is that many professional development efforts may actually stifle much needed discussion and that they likely fail to empower teachers to become agents of change. In light of these perceived deficits, it is essential that continued emphasis be placed on professional development initiatives that are "constructed in ways that deepen the discussion, open up the debates, and enrich the array of possibilities for action" (Little, 1993, p. 148). Although there is no doubt that significant progress has been made in the domain of teacher professional development, there continues to be a need for innovative approaches that emphasize professional learning, require genuine engagement, and promote agency. In the sections that follow we present a professional development framework, informed by ISA that may represent one such innovative approach.

We propose an ISA-informed professional development framework that enables rich discussion and teacher reflection so as to conform to the realizations of reform that Little (1993) and Timperlay (2011) envision. An individual case study in the form of an analysis of an ISA report is provided. Results of the analysis are assembled into a format that an ISA mentor could apply in a series of mentorship sessions such that internal processes for the creation of professional knowledge are invoked. It is hypothesized that recompleting the instrument and improving the framework at strategic stages in a school year potentially permits monitoring progress toward an improved professional identity. In this conceptual model, professional development can itself be considered a reform a dynamic interconnected process involving mentoring, reflective practice, teacher identity formation, and teacher agency. Like Mokhele (2015), we subscribe to the idea that if professional development initiatives "aim to help teachers to change their classroom practices, then they may need to pay more attention to the issue of teacher identity" (p. 116).

Identity Structure Analysis: Method

Most identity assessment methods (Cokley 2007; Crocetti, Rubini, Berzonsky, & Meeus, 2009; Duriez & Soenens 2006) assemble existing instruments to address a specific question of identity and are based upon a single theory of identity (Passmore, Ellis, & Hogard, 2014). Some scholars (Akhtar & Samuel, 1996; Berzonsky, 1999) have introduced new psychometric measures but, like the ad hoc approach, these are designed to address a specific question and cannot be adapted to questions of teacher identity. In contrast, the ISA method is based in a meta-theoretical framework (Erikson's psychodynamic approach, Marcia's identity status theory, Laing's social psychiatry, Berne and Steiner's translational analysis, as well as, symbolic interactionist approaches and cognitive-affective consistency theories) and is amenable to the development of multiple instruments that are sensitive to knowledge of self and biographical and contextual facets of identity (Hogard, 2014; Weinreich & Saunderson, 2003). Explanation for this sensitivity resides in the nature of the bipolar constructs and entities that make up ISA instruments.

An ISA instrument typically consists of 15-20 constructs and 15-20 entities. Constructs concern themes pertinent to the topic of study. Their bipolar nature means that their opposing poles align to tensions within the topic of interest. Entities are the people, institutions, or icons that reference life domains (work and home in the case of this study) and that influence identity development in regard to the topic of choice. Typically, an ISA instrument is created in Ipseus, a dedicated psychological software tool that allows users to create customised identity instruments. Ipseus generates a matrix for the constructs and entities for each person responding to an instrument. Ipseus then presents the combinations of construct and entity to a study participant one at a time and in turn as per Figure 1.

The participant rates the bipolar construct (am straightforward with people … play games with people) along the 9-point zero-centre scale according to her or his understanding of how the entity in question (me as I would like to be) feels with respect to the construct. This should be thought of as completing the rating in the guise of the entity in question. With the rating complete, Ipseus presents the second construct-entity combination for consideration and rating. The process continues until every construct-entity combination is rated. The nature of entities and bipolar constructs and the manner in which ratings are completed means that data inputted into the instrument reveals the values and beliefs of the participant for aspects of self and in regard to influential others. To begin data analysis, Ispeus works to award a positive pole rating for the input a teacher provides for the entity ideal self. Where ideal self has a zero-rated

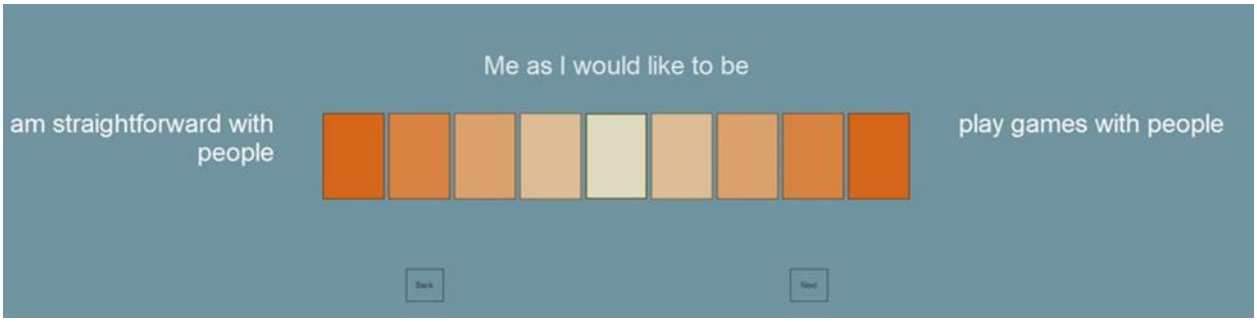

Figure 1. Presentation of a Combination of Construct and Entity in Ipseus.

construct or constructs, Ipseus reverts to anchoring a negative rating for the contra ideal self-entity. Should contra-ideal self be zero rated, Ipseus looks to the entities admired person and disliked person. If need be, Ipseus will generate a positive rating for a construct from the average rating for all entities (it assumes positive bias). With ratings so anchored Ipseus then works to polarize the ratings for all entities to generate scores (-4 to +4). Scores are entered into formulae that are algebraic mirror images of descriptions of the ISA parameters. A simple formula for an ISA parameter (Weinreich & Saunderson, 2003, p. 97) is provided in Figure 2.

Weinreich and Saunderson (2003) provide all formulae for the ISA parameters and an extensive introduction to the ISA method. Ipseus ultimately presents the parameter values it calculates from inputted teacher data in the form of a 20-page ISA/Ipseus report. A template to streamline the report interpretation process calls for review of:

- core and conflicted dimensions of identity;
- idealistic and contra-identifications with influential others;
- empathetic identifications for at least two current and one past entity of self;
- identity conflicts for at least two current and one past entity of self;
- evaluations of, and ego-involvement with, influential others; and
- intersection of evaluations of entities of self and identity diffusion.

The above are thought of as the core evaluative parameters in this study as they are the parameters most often used to evaluate identity structure in ISA studies.

Study Design

The ISA reporting template is applied in this work to the identity of one Hong Kong school teacher of liberal studies with 16 years of experience. He was selected from 18 (six teachers in each of three Hong Kong schools) teachers who completed the instrument in the summer of 2016. Due to the geographic distance between the researchers and the teachers, the instrument was administered using a digital form. The form data was imported into Ipseus for analysis. Passmore (2016) presented ISA analyses for two of the Hong Kong teachers to illustrate that ISA might meet the call for a scale that better differentiates among teachers by illustrating something of the processes and factors that influence identity formation. In contrast, this paper presents the case of one teacher with the goal of illustrating that ISA analysis can generate a professional development framework that can meet the call for reform.

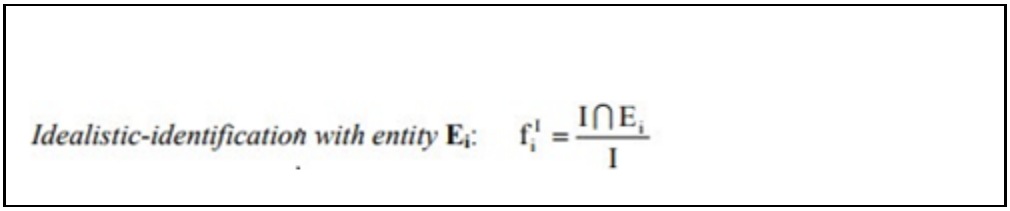

Figure 2. ISA Formula.

Teacher Identity Instrument Design

The teacher identity instrument (see Tables 1 and 2) applied in Hong Kong is an abbreviated version of a more extensive original version. Pilot testing revealed that language issues prohibited completing the original (the instrument was only available in the English language) in reasonable time. The entities of the abbreviated instrument represent the domains of self, work, home, and broader society. The constructs represent themes (team player, approach to class management and teaching, relationship with students, approach to problem solving) that researchers (Armor et al., 1976) consider important to the formation of teacher identity.

Case Study Findings

Structural pressure and emotional significance. Structural pressure is defined as "the overall strength of the excess of compatibilities over incompatibilities between the evaluative connotations of attributions one makes to each entity by way of the one construct and one's overall evaluation of each entity" (Weinreich & Saunderson, 2003, p. 50). Ipseus looks to see if the positive or negative score of each construct is consonant with or dissonant to the overall positive or negative score for an entity. Structural pressure (SP) on a construct is effectively the compatible scores minus the incompatible scores across all entities of an instrument. If an SP is 100 there were no incompatible ratings. An SP of 0 means there were as many compatible as incompatible scores, and an SP of -100 results from dissonant scores on all constructs of an instrument.

Structural pressure reflects the consistency with which a construct is used to evaluate entities. High structural pressure constructs are used in consistent manner to evaluate others. They represent the core and stable dimensions of the identity under consideration. Moderate structural pressure indicates some intrusion of cognitive-affective incompatibilities (dissonances), and a construct that is a secondary (compared with core) dimension of identity. Low structural pressure constructs are used to evaluate others in different ways depending on circumstance and context. Low structural pressure suggests an area of stress and indecision; a conflicted dimension that is liable to poor decision making.

The emotional significance of a construct used during appraisal of one's social world is defined "as the strength of affect associated with the expression of the construct" (Identity Exploration Limited, n.d.). It is the sum of positive and negative structural pressure components irrespective of sign (the sum of absolute magnitudes). It can range from 0.00 to 10.00. Table 3 presents the structural pressure on core constructs and the emotional significance associated with them.

Core constructs. The primary core construct of this teacher concerns *putting the needs of students first*. The high structural pressure and maximal emotional significance suggest he sees it as a black and white issue. *Supporting the way things are* and *believing that there is no finer job than teaching*, are also core constructs that are also used in consistent manner in construing the nature of the job of teaching. Of reasonably high structural pressure and yet still core are: *being straightforward with people*, *communicating well with parents*, and feeling that *there is a lot he can do to get students to value learning*. The lower structural pressure suggests he is less consistent in his use of these constructs but for the most part you can depend on him to adopt the preferred pole (this reasoning is supported by the moderately high emotional significance of these constructs).

Table 1

Entities in the Teacher Instrument

Domain	Label	Classification
Self-Entities	Me, as I would like to be	Ideal Self
	Me, as I would hate to be	Contra Ideal 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	
Work Entities	A good teacher	
	A good student	
	A disruptive student	
	School Principal	
Entities of Subject Taught	Typical Politicians Today	
	Typical Scientists Today	
	Typical Artists Today	
Entities of Broader Society	A person I admire	
	A person I do not like	

Table 2

Themes and Constructs in the Teacher Instrument

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

Table 3

Core and Conflicted Values and Beliefs

Pole 1	Pole 2	Structural Pressure (SP)	Emotional Significance (ES)
Core Constructs			
Puts the needs of students first	Puts personal needs first	86.32	10.0
Takes issue with the way things are	*Supports the way things are*	82.08	8.50
Believes there is no finer job than teaching	Believes there are better jobs than teaching	70.52	7.70
Is straightforward with people	Plays games with people	67.92	6.79
Communicates well with parents	Is remote from parents	59.93	6.48
Feels 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	53.75	6.51
Conflicted constructs			
Depends on others in making decisions	Prefers to work things out alone	-45.28	7.56
Follows a firm agenda when dealing with difficulties	Deals with difficulties creatively	-62.70	7.51

Note. ES minimum value = 0.00, maximum value = 10.00. SP minimum value = -100, maximum value = +100. Preferred pole represented in italics.

Three of the core constructs lie in the team player theme: supports the way things are, believes there is no finer job than teaching, and is straightforward with people. He is a teacher who works well with and for others. Two of the core constructs concern classroom management and teaching: communicates well with parents and feels there is a lot he can do to get students to value learning. The last core construct, puts the needs of students first, concerns his relationship with students.

Conflicted constructs. The conflicted constructs fall in the theme of approach to problem solving and revolve around where, when, and under what circumstances it is appropriate to work independently or to depend on others; and when it is better to work creatively or follow a known policy. Moderate emotional significance associated with extreme, negative structural pressure suggests these constructs may be the source of some considerable stress. This thinking is bolstered by the importance that working as a team player holds for this teacher, this being the case, not really knowing where and when to work alone and/or creatively to solve problems suggest events around conflicted constructs will be stressful.

Developing an ISA framework to guide professional development might begin with consideration of coping mechanisms for issues that surround conflicted constructs. These are arenas where a person is unsure of their stance and as such is likely to be open to suggestions. Suggestions for change around core constructs will often be resisted for these are areas where a person is sure of their thinking. To counter this effect an alternate tack is to link a conflicted construct to one that is core. This strategy can give a person more to think about other than the issues that surround the primary core constructs of their identity.

Professional development for this teacher should be directed to toward helping him feel more comfortable about working independently and to clear up circumstances when he might seek guidance. It should also help him to come to know when it is appropriate to solve problems according to known guidelines and when to work creatively. In this regard begin with questioning to uncover problem solving activities he finds stressful then work with him to develop a set of guidelines for addressing the challenges. Linking a conflicted construct to a core construct might be accomplished by associating the newly formed guidance rules to the core construct of supporting the way things are: "I can tackle this using the rules as the rules represent the way things are."

Idealistic identifications and contra-identifications. Idealistic identification is defined as "the similarity between the qualities one attributes to the other and those one would like to possess as part of one's ideal self-image" (Weinreich & Saunderson, 2003, p. 58). Ipseus notes the positive attributes accorded the ideal self during data entry and also the attributes associated with the remaining entities. This makes for an idealistic identification parameter that ranges in value from 0.00 to 1.00 (if an entity possesses none or all 15 of the positive attributes associated with ideal self then fi=0/15 or 15/15). However, there is more to consider than the absolute value. Support for the 15 attributes (constructs) of the teacher identity instrument of this study, fi = 5/15 = 0.33 and for another entity who possesses six of the attributes of ideal self, the idealistic identification value is 0.4. Despite the similar degrees of idealistic identification with various others, the qualitative differences among these values can be limited (similar attributes are found across the entities) or they can be significant (the two entities have few if any attributes in common). In the end, idealistic identification is important for its capacity to reference similarity between the qualities one associates with an admired entity and the set of attributes one would like to possess. In doing so it reveals not just a person's role models but also the characteristics they will seek to emulate over the long term. The importance of idealistic identification for this work is that ISA-based mentoring to further the manifestation of the attributes of an admired entity will likely meet with a warm reception.

Contra-identification is defined as "the similarity between the qualities one attributes to the other and those from which one would wish to dissociate" (Weinreich & Saunderson, 2003, p. 58). Just as for idealistic identifications, negative association (range 0.00 to 1.00) across entities may differ qualitatively to some considerable degree (here though the concern is attributes that are rated along the poles associated with ratings for contra-ideal self). Contra-identification indicates not just negative role models but also the negative characteristics they are seen to possess and in consequence the characteristics a teacher will wish to shun over the long term. Learning of qualitative and quantitative differences in the contra-identifications of a teacher makes available multiple routes to effective mentoring. For instance, simply informing one teacher of a contra-identification with the entity *a disruptive student* may be enough to invoke self-directed improvement, for another teacher, explanation may be required to indicate why the disruptive student may be associated with disliked qualities (they are remote from parents because of a domestic issue, they are experiencing stress as a result of a personal matter etc.). Increasing sensitivity to the perceived attributes of the disruptive student is important for its capacity to raise teacher performance and by extension to raise the performance of a school (see Table 4).

He shows strongest positive affiliations with: *school principal*, *good teacher*, *good student*, and *politicians today*. Relative to me at work, he sees the good teacher displaying superior behaviour regarding: dealing with people straightforwardly, communicating well with parents,

Table 4

Idealistic and Contra-Identifications

Entity	II	CI
School Principal	0.75	
A good teacher	0.67	
A good student	0.67	
Politicians today	0.67	
A good student		0.33
A disruptive student		0.75

Note. II minimum value =0.00, maximum value = 1.00. CI minimum value =0.00, maximum value = 1.00.

feeling there is a lot he can do to get students to value learning, siding with the advantaged in society, putting the needs of students first, and believes there is no better job than teaching. Given the admired status of the good teacher you can expect that mentoring efforts to help him work toward greater achievement in these areas will be warmly received.

The individual in this study exhibits significant negative identification with the *disruptive student* and moderate contra-identification with the *good student*. Relative to the good student the disruptive student is seen to: *play games with people*, *take issue with the way things are*, *be remote from parents*, *confront awkward people*, *put personal needs first*, and *maintain a formal relationship with students*. Four of these constructs are core to the teacher's identity. That the disruptive student is seen to take an oppositional stance to these core constructs may go some way toward explaining the negative sensitivity toward this entity.

Empathetic identifications. Empathetic identification is defined as "the degree of similarity between the qualities one attributes to the other, whether 'good' or 'bad,' and those of one's current self-image" (Weinreich & Saunderson, 2003, p.60). Whereas idealistic and contra-identification concern positive or negative attributes a teacher has in common with the entities of the instrument; empathetic identification concerns both good and bad attributes the teacher and the entities have in common. Further, while idealistic identifications represent long-term aspirations empathetic identifications are of the here and now and in consequence they may change as a teacher moves from one life domain to another (home or work) and from one biographic stage (*me as a student teacher*, *me at work*, and *me as I would like to be*) to another. The minimum empathetic identification value is 0.00 while the maximum is 1.00.

Current empathetic identifications based in me at work are with a good teacher (0.88), a good student (0.88), school principal (0.88), and politicians today (0.88). Current empathetic identifications based in me at home are with my closest family member (0.63), a good teacher (0.50), a good student (0.50), politicians today (0.50) and school principal (0.50). Past empathetic identifications based in me as a student teacher are with a good teacher (0.73), a good student (0.73), typical politicians today (0.73), and school principal (0.73).

At work we see empathic identification with the behaviours of the admired entities: a good teacher, a good student, politicians today, and the school principal. The same entities are represented at home but the degree of empathetic identification is much reduced. This maybe a teacher who can "turn it on" to behave more as a good teacher in the workplace or it may be that something in the home is preventing him from behaving as the admired entities. Encouragingly,

the participant feels more like the admired entities as he is now (me at work) than he did in the past (me as a student teacher).

As has been noted, there are differences in the attributes he associates with me at work and the good teacher. Finding that this teacher largely feels he can behave according to the characteristics he associates with the admired entity (a good teacher) in the work place is encouraging as it suggests there may be few unseen barriers if applying an ISA framework that seeks to help him behave more as the admired good teacher.

Conflicted identifications. Conflicted identification is a combination of contra and empathetic identification (range 0.00 to 1.00). According to Weinreich and Saunderson (2003), "In terms of one's self-image the extent of one's conflict with another is defined as a multiplicative function of one's current empathetic identification and one's contra-identification with that other" (p.61). It references being as another while at the same time wishing to disassociate from negatively evaluated characteristics that are seen to be held in common. The decision to mentor to overcome a conflict of identity will depend on the underlying balance of contra and empathetic identification and the degree to which the conflict has persisted over time. Where the cause is high empathetic identification in combination with low contra-identification the conflicted identification may not be troublesome and mentorship may not be required. Where the cause is primarily contra-identification, mentoring should focus on the negative characteristics associated with both self and the entity of concern.

At work this teacher exhibits significant identification conflict with: the good student (0.54). Current work-related identification-conflicts based in me at home are: a disruptive student (0.53). Past identification-conflicts based in me as a student teacher are: disruptive student (0.52), good student (0.49). That the current conflict of identification with the good student also existed in the past suggests that this relationship represents a long-term issue that needs to be addressed. Conflict of identification with the disruptive student today is only present in the home environment suggesting the issue has been resolved for the most part at work.

Conflicted identifications like conflicted constructs represent areas around which a framework for mentorship can be focussed. Given that conflicted identification is the product of empathetic and contra-identifications, raw scores that are negative for me at work and for the good student ought to represent the more troubling aspects of the conflicted identification pattern. Unfortunately, me at work is not associated with any negatively scored constructs. However, me at work does exhibit a neutral stance toward constructs where the good student scores negatively: *prioritizes achievement, prefers to work things out alone, deals with difficulties creatively*. The latter two constructs are conflicted for the teacher, which suggests they would be good places to start a conversation for future growth.

Evaluation of and ego-involvement with others. Evaluation of others is defined as "one's overall assessment of the other in terms of the positive and negative connotations of the attributes one construes in that other, in accordance with one's value system" (Weinreich & Saunderson, 2003, p.47). That is, evaluation of another refers to the sum of the scores attributed to that entity. This parameter is normalized by dividing the maximum value for ego-involvement providing a range from -1.00 (wholly negative) to 1.00 (wholly positive). Ego-involvement is defined as "one's overall responsiveness to the other in terms of the extensiveness both in quantity and strength of the attributes one construes the other as possessing (Weinreich & Saunderson, 2003, p.48). Quantity references the number of non-zero-rated attributes associated with an entity, while strength refers to the distance each rating lies away from a zero-center rating. The range for this parameter is 0.00 to 5.00.

Table 5 indicates that the teacher in this study evaluates the good teacher higher than the good student and much higher than the disruptive student. Ego involvement with the good teacher (and with the two student entities) is moderate suggesting moderate motivation to operate as a good teacher while at work. Evaluation of the school principal is moderately high with moderate ego-involvement.

Evaluation of self, extent of identity diffusion, and identity variant. Self-evaluation is defined as "one's overall self-assessment in terms of the positive and negative evaluative connotations of the attributes one construes as making up one's current (past) self-image, in accordance with one's value system" (Weinreich & Saunderson, 2003, p. 90). That is, self-evaluation (range -1.00 to 1.00) refers to measurements wherein characteristics associated with the various entities of self (me as a student teacher, me at work) 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 (range 0.00 to 1.00) is simply a measure of the extent of a person's conflicts of identification. It is defined as "the overall dispersion and magnitude of one's identification conflicts with others" (Weinreich & Saunderson, 2003, p. 64). Identity variants in ISA are reported in a figure that places the various entities of self within an identity variant category according to their combination of self-evaluation and diffusion. The central identity variant (indeterminate) is considered optimal (see Figure 3). Interpreting findings for identity diffusion requires consideration of why and how the placement of the entities of self is different from the optimal. Self-evaluation has a minimal value of -1.00 and a maximum value of 1.00. Identity diffusion has a minimum value of 0.00 and a maximum value of 1.00.

As Table 6 illustrates, most of the teacher's identity variants fall within the indeterminate cell of Figure 3. Encouragingly his self-evaluation at present (me at work) has increased from his time as a student teacher suggesting he feels he is on the right track in this domain. However, me at work is in the confident sector suggesting that his estimation of work performance is unrealistically high (higher than me as I would like to be which suggests he sees no room for future improvement). Mentoring to temper interpretation of current performance is recommended. Success in this regard might be accomplished by helping him realize limitations that his conflicted identifications and constructs may be imposing on his current performance.

The entity me at home lies in the indeterminate sector having lower self-evaluation than me at work. Currently he feels better about himself at work than at home and he feels better about himself at work now than he did in the past. Levels of diffusion are lowest for me at work which reflects the finding that conflicts of identity (a disruptive student) have been resolved over time (to a degree) in this domain.

Table 5

Evaluation of and Ego Involvement with Others

	Evaluation of others	Ego involvement with others
A good teacher	0.76	2.86
A good student	0.36	2.86
A disruptive student	-0.71	2.14
School Principal	0.55	2.71

Note. Evaluation of others: minimum value =-1.00 maximum value = 1.00. Ego-involvement with others: minimum value = 0.00 maximum value = 5.00.

The entity, *me as I would hate to be* lies in the crisis sector implying a lack of comfort when acting as this entity. Ego-involvement with this entity is maximal whereas for other entities of self it is low. The primary concern of this teacher then is avoiding the behaviours he deems to be unfavourable. That is, he has a very clear idea of who he does not want to be, but he is far less concerned with who he wants to become. This being the case, he might be amenable to taking on a proposed set of behaviours in mentorship sessions. Best progress will be made if the proposed behaviours match his long-term goals, help him offset conflicted identification patterns with others, and help him better cope with conflicted constructs.

Toward a Personalized Path for Professional Development

We begin by illustrating how key points derived from the above ISA analysis might be summarized and assembled to inform a personalized path or framework for professional development. This framework would serve as a guide for an initial mentorship session.

To begin, note that the primary core construct of this teacher concerns putting the needs of students first. Also note that remaining constructs of import are supporting the way things are and believing that there is no finer job than teaching. These constructs form primary lenses through which he views the job of teaching and wherein his role is first and foremost to act as a team player.

His conflicted constructs concern problem solving: when and under what circumstances it is appropriate to work independently and creatively, and when it is best to consult management and follow a known policy. These constructs likely present with some considerable stress; and as such, he is likely aware that they represent troublesome arenas. A personalized path for professional development should direct him toward feeling more comfortable about when to work independently or with others, and where and when he ought to be creative or act according to a framework. Development of the necessary guidance could begin with questioning to uncover examples of problem-solving activities he finds stressful and then working with him to develop a set of rules he can follow.

The participant's idealistic identification with the good teacher sees him wishing to deal with people straightforwardly, communicate well with parents, feel there is a lot he can do to get students to value learning, side with the advantaged in society, put the needs of students first,

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

Figure 3. Classification of Identity Variants.

Table 6

Case Study Identity Variants

	Me at home	Me at work	Me, as a student teacher	Me, as I would hate to be	Me, as I would like to be
Self-evaluation	0.27	0.82	0.35	-0.59	0.75
Identity diffusion	0.38	0.27	0.39	0.45	0.32
Identity variant	Indeterminate	Confident	Indeterminate	Crisis	Indeterminate

and believe that there are no better jobs than teaching. Mentoring toward these long-term behavioural aspirations would likely be welcomed by the teacher. Relative to the good student the negatively rated disruptive student: plays games with people, takes issue with the way things are, is remote from parents, confronts awkward people, puts personal needs first, and maintains a formal relationship with students. Mentoring to help the teacher understand and empathize with the reasons why the disruptive student might behave in these ways may go some way toward helping him reach these students in his teaching.

The teacher empathetically identifies with the same entities at work both now and in the past. The same entities appear in his empathetic identification pattern in the home but to a lesser degree. Change in the intensity of the empathetic identifications suggests potential for change in behaviour when moving from one domain to the other. There is long-lasting conflicted identification with the good student entity. The constructs of this conflicted identification pattern are: prioritizes achievement, prefers to work things out alone, and deals with difficulties creatively. That the latter two constructs are conflicted, suggests they would be good places to start a conversation for future growth.

Evaluation of the entity me at work is higher than that of me as a student teacher which implies that he has moved toward his aspirations in the workplace. However, evaluation of me at work is unreasonably high, even higher than for me as I would like to be which suggests that he sees no room for future improvement. Mentoring to temper interpretation of current performance is recommended. Success in this regard might be accomplished by helping him realize the limitations that his conflicted identifications and constructs may be imposing on his current performance.

The entity me as I would hate to be is in crisis. Ego-involvement with this entity is far higher than for me as I would like to be suggesting administration could push a set of values and beliefs on him as part of a professional development scheme. It is recommended that any approach to professional development be oriented along the lines of his long-term goals; and that it work to help him offset his conflicted identification patterns with others; and finally, that it help him better cope with issues that surround his conflicted constructs.

We note that it may be the case that an ISA-trained mentor will be required to see successful implementation of the above ISA framework. However, other than structural pressure the parameters of ISA are well known and in common usage. Thus, on reading that a teacher idealistically identifies with a particular entity and that certain behaviours relative to that entity are seen to be lacking, it should be possible for a teacher-mentor (not trained in ISA) to think of ways and means whereby greater expression of the long-term aspirant behaviours can be attained. This reasoning also holds for teacher-guided mentorship regarding conflicts of identification, barriers to the expression of certain behaviours in the workplace due to change in empathetic identification and so on. Again, additional research may indicate that ISA frameworks require a mentor who is trained in the ISA method. At this stage we are simply suggesting that the potential ISA frameworks hold for personalized professional development might very well be realized by a teacher-mentor who is uninitiated in the application of an ISA framework. What follows is a proposed and idealized route for implementation and application of the ISA framework.

Over the course of an academic year a mentee-teacher and mentor will engage in several rounds of ISA-guided mentorship. Ideally, we see a mentee teacher completing the instrument in the September of an academic year and meeting with the mentor two times in the fall semester. At the first meeting, findings in the framework will be delivered to the teacher and the

advisements for improved behaviours will be provided and discussed. At the close of the first meeting the teacher will leave with the understanding that an honest attempt to integrate the noted practices into day-to-day teaching will be required to effect desired change. In the second session, the mentor and mentee will discuss successes and failures regarding implementation of the findings of the initial ISA framework. Discussion will focus on encouraging even greater expression of those behaviours that were successfully met and ways and means for overcoming barriers to the expression of desired behaviours. In January the instrument will be re-completed and the ISA-framework will be regenerated and delivered to the teacher. Additional mentorship sessions will take place in February and April. The intent in the winter sessions will be to work as before, integrating advisements in the framework into day-to-day practice. Following the April mentorship session, the instrument will be completed a final time. Repeat completion of the instrument and reformulation of the framework in this way holds potential for evidencing change in professional identity.

To Pomerenk and Chermack (2017) mentoring is about providing encouragement that causes a mentee to consider new perspectives and to take next steps toward goals. This understanding is consistent with the purpose of our proposed ISA-guided mentorship sessions: to encourage mentees to work toward improvement. The information provided in an ISA framework serves to direct a core concept in mentorship orientation to change (Pawson, 2004) based in the current status of the teacher's professional identity. That is, holding recommendations of the ISA framework in mind and acting regularly upon them may, we feel, engender increased performance of aspirant behaviours whilst mitigating conflicts of identity that are holding performance back. Accordingly, we feel that ISA guided mentorship has potential for informing a teacher of issues in their current view of self, providing prompts that may help with overcoming issues, and ultimately nurturing improvements in professional identity.

Conceptualizing Professional Development and ISA-informed Mentorship as Reform

Despite rhetoric calling for a more progressive approach to teacher professional development, strategies that reflect a one-size-fits-all orientation persist (Burnham, 2015; Lieberman, 1995; Yendol-Hoppey & Dana, 2010). Over two decades ago, Darling-Hammond and McLaughlin (1995) noted that the success of the professional development reform agenda relies on teachers' success in adopting new visions of practice and unlearning entrenched practices and beliefs. However, then like now, it would seem that few opportunities and little support for reform-focused professional development exist for teachers. What Darling-Hammond and McLaughlin described as "prepackaged" and "traditional top-down" training approaches remain the status quo. Those working in schools know that professional development activities are commonly delivered through ineffective "one-shot" workshops (Burnham, 2015). Perhaps it should not be surprising that outdated models of delivery present challenges for actualizing authentic educational reform. According to Scribner (1999),

> To overcome this stilted approach to learning, professional development will need to be conceptualized as more than a vehicle for reform. Rather, professional development must be considered a reform in and of itself; that is, professional development must become an integral part of teacher work and the culture of schools. (p. 263)

This paper embraces the above statement, proposing that ISA derived mentorship frameworks potentially represent an innovative type of professional development that can be conceptualized as reform. Further, using ISA for the evaluation of teacher identity and for the formation of mentorship frameworks is presented as an answer to Lieberman's (1995) call to "deepen our understanding of how teachers acquire the experience that encourages them to grow and change in the context of school reform" (p. 592). It is our contention that mentorship sessions delivering ISA-derived personalized mentorship frameworks might serve as an innovative means of promoting reflective practice that can in turn support the formation of professional identities that foster teacher agency. It is important to highlight that this contention is only an initial hypothesis. Future iterations of this work will involve the implementation of an ISA-derived personalized mentorship framework so as to provide opportunities to consider empirical evidence that may support or contradict this supposition.

Considering the realities of today's diverse schools and established understandings concerning best practices in education, a new approach that moves away from the one-size-fits-all paradigm and moves towards a tailored response to individual teacher needs is not only warranted but long overdue. It is time to acknowledge, and give consideration to, what Geijsel and Meijers (2005) see as "an alternative paradigm of learning" that results from contemporary changes and new realities in education. Building on the work of Illeris (2002), Geijsel and Meijers suggest "that the paradigm shift is realized only when teachers become able to learn creatively, as opposed to reproductively" (p. 420). Given this understanding, involving teachers in active, as opposed to passive, professional development experiences is an imperative component of reform. Whereas traditional models of professional development rely on the passive reproduction of predefined information or knowledge for teachers, active models rely on the construction of understandings by teachers. The latter model recognizes and accepts teachers as active players in the process of education who possess some level of professional autonomy and efficacy.

If we accept the constructivist premise that "people learn best through active involvement and by thinking about and articulating what they have learned" (Lieberman, 1995, p. 592), it is logical to accept that identity formation is a fundamental component of ongoing teacher growth and development. After all, like learning, teacher identity is formed through an active, ongoing, fluid, and personal process of negotiating educational and teaching-related experiences. Consequently, the construction of teachers' professional identity needs to be conceptualized as a form of learning (Geijsel & Meijers, 2005). Guided by this understanding, professional identity formation can be viewed as "a circular learning process, in which experiences and the self-concept are related through using concepts and endowing them with personal sense" (Geijsel & Meijers, 2005, p. 425). Beijaard et al. (2004) would likely agree as they describe identity formation as "a process of practical knowledge-building characterized by an ongoing integration of what is individually and collectively seen as relevant to teaching" (p. 123). Likewise, Battey, and Franke (2008) suggest that "identity does not sit separately from knowledge and skills" rather, [it] is shaped by the knowledge and skills we acquire and shapes the knowledge and skills we seek to develop (p. 128). When viewed in this way, identity can be understood "as the ever-changing configuration of interpretations individuals attach to themselves, as related to the activities that they participate in" (Geijsel & Meijers, 2005, p. 423). In other words, identity and learning are not only interwoven and interdependent; they evolve together as a result of new experiences, emerging understandings, and prevailing beliefs that relate to professional practice.

The close and intertwined relationship between learning and identity formation is precisely why teachers (or at least those with an appreciation for constructivism) frequently stress the importance of students knowing themselves as learners. Lieberman (1995) suggests that approaches "that are built on this view of learning are at the heart of a more expanded view of teacher development that encourages teachers to involve themselves as learners in much the same way as they propose their students do" (p. 592). It is reasonable to suggest that if we encourage students to know themselves as a way of facilitating growth, we should be doing the same for teachers. Following this line of reasoning, professional development initiatives need to be identified, planned, and enacted within a framework that firmly situates teachers as learners (Darling-Hammond & McLaughlin, 1995). Williams (2001) suggests that one way such a learner-centred view of teaching challenges the traditional approach to professional development is by embracing the transformational concept of constructivism. Williams notes, constructivism "exemplifies the belief that learners create their own knowledge structures rather than merely receiving them from others" (p. 5). In accordance with this understanding, we subscribe to the notion that constructivist practices must be present in professional development initiatives "if teachers are to be convinced of the validity of those practices and to understand them well enough to integrate them into their classrooms" (Williams, 2001, pp. 11-12). Extrapolating on this thinking, we have come to understand teacher identity as a knowledge structure that is constructed in the mind of the teacher and not something that can simply be transmitted there.

The perspective outlined above permits us to look at teacher identity formation through a constructive-developmental lens. This is a lens that prompted Rodgers and Scott (2008) to reiterate calls from theorists for teachers to become aware of their identities and the contextual forces that shape them; "teachers should go about making the psychological shift from being authored by these forces to authoring their own stories" (p. 733). Fostering a teacher's awareness of their identity and the forces that construct that identity may hold potential for supporting meaningful professional growth. Such an approach could in turn support teacher agency and promote reform-minded action, thus representing authentic and successful professional development. The stage would be set for the psychological shift necessary for teachers to enact meaningful change.

Battey and Franke (2008) remind us that "identity is in itself a tool that mediates action" (p. 129). From this perspective, if we view professional development as a dynamic sociocultural "space for acquiring new knowledge, re-crafting identities, and challenging existing cultural and social practices" (Battey & Franke, 2008, p. 129), we can begin to understand how it might be conceptualized as reform. Furthermore, we can begin to see the importance of creating professional development spaces or interventions with careful consideration for how they can support and influence professional identity formation.

It is our contention that any professional development initiatives seeking to enact authentic reform will acknowledge the critical role of teacher identity and leverage a constructivist understanding of professional identity learning. The understanding being that educational reform, the realization of a paradigm shift, requires reflective teachers who are capable of learning creatively rather than reproductively (Geijsel & Meijers, 2005). The time has come for professional development initiatives that facilitate creative and active learning by shifting away from reproductive and passive learning models; we must give teachers the space they require to author their own stories and become agents of educational change. Consequently, it would seem that the call for "teachers to assume agency, find their voice, and take the authority to shape

their own professional paths and identities" (Rodgers & Scott, 2008, p. 733), is particularly relevant at this juncture. Like Rodgers and Scott, we believe it is possible to design interventions that challenge teachers by overtly making them aware of the ways in which their identities have and are being shaped. Moreover, we believe it is also possible to support teachers in reflection upon those forces in order to help them become more self-determining in their professional practice. Like Bullough (2005), we subscribe to the notion that self-knowledge, leading to professional identity, is "central to being and becoming a teacher" (p. 144).

As we noted at the onset of this paper, of particular importance to our position is the understanding that the shifting nature of a teacher's identity results from it being "shaped and reshaped in interaction with others in a professional context" (Beauchamp & Thomas, 2009, p. 178). If we accept that professional identity is a learning process that takes shape within a constantly evolving sociocultural and constructivist context, we can entertain the notion that developing an awareness of identity might be facilitated by the company of a mentor who has been made aware of the forces shaping that identity. Johnson (2003) elucidates,

> …perhaps most fundamentally, our identity shifts in our relationships with people, with learners as well as colleagues. Understanding who I am is relational, constructed and altered by how I see others and how they see me in our shared experiences and negotiated interactions. (p. 788)

In the same vein, Bullough (2005) states that "identity is the way one is with and for others; it is the basis of an individual's claims both to dignity and to authenticity; it is a framework for action and the personal grounding of practice" (p. 144). The presence of others provides an invaluable opportunity for a teacher to recognize, think about, construct, articulate, understand, and ultimately shape their own identity. Battey and Franke (2008) aptly note: "We do not develop our identities as teachers in isolation" (p. 128).

Similarly, Geijsel, and Meijers (2005) remind us that "identity is a learning process: it is not something that happens to you, but something that you try to construct with the help of culturally available building materials" (pp. 423-424). As we see it, one of the most accessible and easily leveraged resources is that of other professionals who form the sociocultural milieu of the educational environment. One way this valuable human resource can be leveraged is by seeing them as what Rhodes and Beneicke (2002) call "coach-mentors": individuals that "have the potential to go beyond the instrumental level of mechanistic direction for colleagues and would ideally offer the opportunity to reflect deeply on practice" (p. 304). Similar to the notion of a consultative mentor (Walkington, 2005), a coach-mentor is seen as being more than a directive supervisor; this is an individual who is charged with the responsibility of fostering a collegial relationship that promotes reflective practice and supports professional growth. The mentoring-coaching process, as Pask and Joy (2007) indicate, "entails moving from framing and understanding the present to reframing and implementing the preferred future alternative through carefully reflected action" (p. 246). Given this understanding, it is our contention that coach-mentors may hold particular promise for influencing identity formation via the promotion of discussion and critical reflection. In a similar vein, McIntyre and Hobson (2016) argue that "external mentors" can enhance beginner teachers' professional identity development by creating a "space in which mentees are able to openly discuss professional learning and development needs, discuss alternatives to performative norms and take risks in classrooms" (p. 133). The current paper argues that by establishing such discursive space, the conditions for teacher agency, and therefore educational reform, can likely begin to be established.

Because we understand mentoring as including coaching (Clutterbuck, 1991; Landsberg, 1996), from this point forward we use the term mentor to refer to the notion of coach-mentor. As Rhodes and Beneicke (2002) indicate, "both coaching and mentoring are complex activities deeply associated with the support of individual learning" (p. 301). Further highlighting this connection, Pask and Joy (2007) state that the overarching concept here is mentoring as it "is the essential prerequisite to coaching and must be followed by it … Mentoring and coaching belong together. To engage in one without the other is futile" (p. 246).

Pointing to the importance of such players, Timperley (2011) suggests that "it is not easy for anyone to identify their own professional learning needs because it is difficult to step outside one's own frame of reference … they need the assistance of others" (p. 15). Research has shown that positive mentoring can help a mentee develop their sense of professional identity and foster an awareness of abilities (Kram, 1985). As promising as this may make mentoring sound as a professional development intervention, the work of Hoffman-Kipp (2008) reminds us that this process of identity development is only possible because of critical reflection. Consequently, we should not interpret mentoring as the being the primary driver of professional identity construction, rather we should see it as an intervention that has potential for stimulating or prompting reflective practice. Important to mentoring is the notion that professional learning can take place within the context of professional practice and can be enhanced by sharing constructive dialogue (Kennedy, 2005). According to Clutterbuck and Lane (2004), "mentoring offers the opportunity to take time to reflect, to develop ideas and to draw breath - the essential element of high performance" (p. 163). From this perspective, the mandate of the mentor can be viewed as being similar to what Hoffman-Kipp (2008) identifies as being his own personal educative aspiration:

> … to help teachers make conscious the ways that they have the power to change, redirect, or reject the ways in which their professional identity has been made for them and to reclaim the power to build that identity themselves based upon their ideals. (p. 161)

Encouraging reflective practice of this nature, it would seem, is particularly appropriate for supporting the construction of autonomous and self-determining professional identities.

Perhaps it goes without saying that effective mentoring is required in order to accomplish this important work of encouraging beneficial reflective practice. Consequently, any professional development model that leverages mentoring needs to adequately support the work of mentors. In other words, the conditions and tools for effective implementation of mentoring must be made available to mentors. Consistent with this line of thinking, it has been suggested that the dearth of guidance concerning implementation of mentoring "needs to be addressed if the potential benefits of these mechanisms are to be realised" (Rhodes & Beneicke, 2002, p. 303). Such guidance for mentors, according to Rhodes and Beneicke (2002), "will need to carefully identify the teacher learning needs which truly need to be met in order to raise standards and attainment within their schools" (p. 304). Similarly, Clutterbuck and Lane (2004) argue that in order to be effective, mentors "need to be able to adjust their approach to meet the differing situations within which their mentees operate, so bringing a tailored approach that is individual to the needs of that mentee in their particular circumstances" (p. 197). This diagnostic perspective acknowledges the situation-specific context of mentoring and points to the value of a mentor who can "bring a different emphasis dependent on the mentee's need at that time (Clutterbuck & Lane, 2004, p. 197).

Because of its ability to provide a snapshot of professional identity at different biographical stages, ISA could potentially serve as a tool for helping facilitate personal mentoring relationships. Identity analysis summaries derived from ISA reports have the capacity to inform and guide the work of mentors as they encourage their mentees toward reflective practice. We anticipate that an ISA-informed mentorship can represent what Kennedy (2005) calls a "transformative view" of professional development "where the relationship provides a supportive, but challenging forum for both intellectual and affective interrogation of practice" (p. 243). Similarly, our proposed ISA-informed framework can be viewed as a potential means of facilitating and creating what McIntyre and Hobson (2016) refer to as a "safe, discursive space" (p 147) for professional learning and identity development. In their research, McIntyre and Hobson found that a mentor can act as a catalyst for the creation of "a form of refuge and reflexive space, within which participants could critically reflect on their practice and that of their school" (p. 152). Because the ISA instrument is an identity-focused tool, we hypothesize that it can help facilitate and guide the work of a mentor, essentially it creates a space for constructive discourse.

To reiterate what was stated at the opening of this the penultimate section of our work, we believe that ISA frameworks as presented in this paper hold promise for contributing to a tailored or personalized approach to mentoring. It is our contention that a professional development model (see Figure 4) that embraces identity-specific mentoring and encourages directed reflective practice will honour and empower teachers as capable agents of change. Professional development conceptualized in this way not only represents reform, it actually embodies it.

Conclusion and Suggestions for Future Research

Much work remains in order to realize school reform efforts. Given the pivotal role teacher professional development plays in the educational change process, there is a need to rethink traditional approaches (Williams, 2001). This paper represents a conceptual starting point for the future evolution of progressive and responsive professional development initiatives. More specifically, the exploratory work outlined here is intended to promote conversation about the possibilities associated with a personalized approach to fostering professional growth as it relates to teacher identity. Given the philosophical and theoretical underpinnings of this work, the authors are optimistic that an ISA-informed approach may help jurisdictions, institutions, and administrators better meet the professional development needs of individual teachers. However, this optimism is tempered with an understanding that more needs to be done to empirically establish, and make explicit, the possible role of ISA in professional development initiatives. The current paper represents a conceptual foundation on which future studies, more empirical in nature, can be established. Future studies that involve the implementation of an ISA-informed mentorship framework will determine the usefulness of the tool. That is, we again acknowledge that until such an evaluation is completed, the applicability of this tool is unknown and speculative. The usefulness of the proposed ISA-informed professional development model will ultimately be determined by its ability to change teacher identity and in doing so positively impact teacher effectiveness and student achievement.

To assist with this future work, we propose the conceptual model in Figure 4 that links ISA, mentoring, reflective practice, professional identity formation, teacher agency, and reform. It is our contention that any teacher professional development that aims to truly enact educational

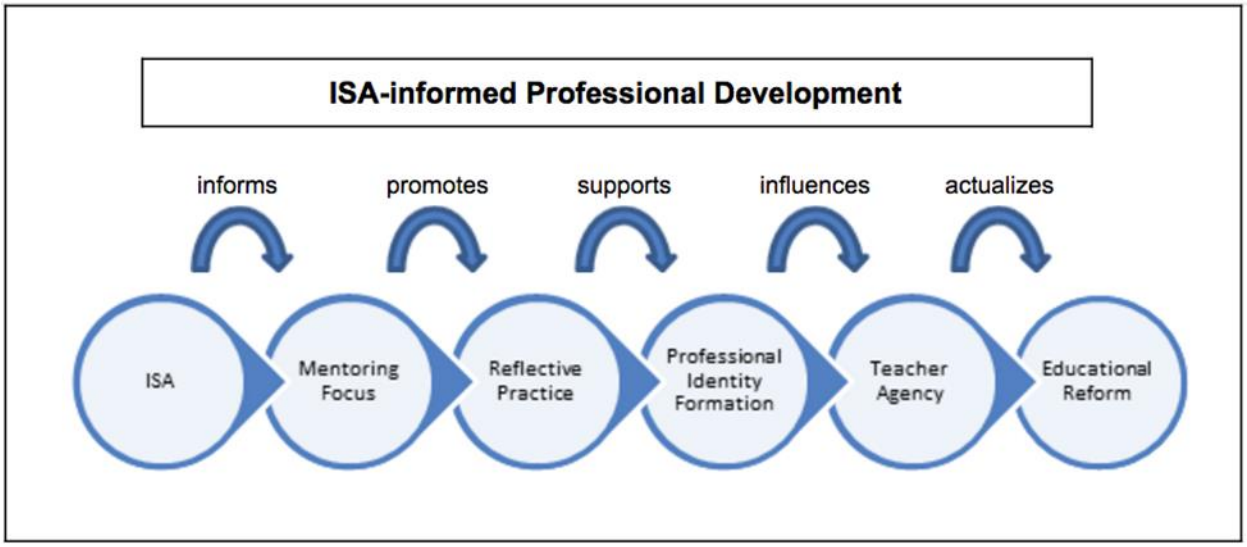

Figure 4. Proposed ISA-Informed Professional Development Model.

reform will need to acknowledge the importance of teacher identity formation and teacher agency in that process. The conceptual model we have offered not only places emphasis on the importance of teacher identity, but also suggests a possible pathway for supporting the formation of that identity by way of reflective practice that is promoted by ISA-informed mentoring. As we have noted previously, of particular importance to this paper is the understanding that a teacher's identity is "shaped and reshaped in interaction with others in a professional context" (Beauchamp & Thomas, 2009, p. 178). This sociocultural and constructivist understanding of identity development, combined with our firm belief in the value of reflective practice, leads us to consider the possible benefit of leveraging ISA-informed mentoring as a logical impetus for authentic educational change. Like Little (1993), we believe that "one test of teachers' professional development is its capacity to equip teachers individually and collectively to act as shapers, promoters, and well-informed critics of reforms" (p. 130). Consequently, we want future research to explore the effectiveness of our model in cultivating action-inclined teachers.

The next step in this research then is the formation and implementation of a professional development framework that leverages and builds on the foundational ideas shared in this article. At present, the plan is to establish an ISA-informed mentorship relationship for an individual teacher over an eight-month period. In addition to informing and guiding the work of the mentor, ISA will be used to monitor any changes in the teacher's identity along the way. During that time, implications associated with the customized and targeted mentoring relationship will be explored in detail. As stated previously, the purpose of the current paper is simply to provide a theoretical foundation on which such future research can be developed. That future work will provide opportunities for empirical exploration and validation of our conceptual model.

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