Conceptualizing How Mature Teachers Can Influence Students' Growth in Learning

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Abstract

This article has two purposes. First, it reports the first year results from focus group methodology conducted to determine how teacher characteristics may influence students' learning. Second, the article establishes a framework to support ongoing research related to the professional maturation of teachers. Both of these research outcomes are presented in diagram format. Plans for further research into the teacher characteristics that were identified by the first year of research into this topic are presented and discussed.

Keywords: teacher preparation, teacher maturation, students' learning

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Introduction

Our research started with our belief that there may be some teacher characteristics, viewed by those who assess the work of teachers, as being strongly related to how the teacher's students learn. Student learning is complex, and may be a function of many variables and influences in the student's life. However, many would agree that the professional efforts of the teacher are an essential influence to the student's learning success. Indeed, Cochrane-Smith and Power (2010) identify trends in teacher education programs with some relating to heightened teacher accountability for students' learning. Recognizing what characteristics may relate to or even predict improvements in students' learning has the potential to guide many teacher preparation decisions. Such recognition could influence the trajectory of any teacher's professional development path once they enter the profession.

Research calls for accountability measures that emphasize the impact of teacher preparation programs and pathways on student learning outcomes (Cochran-Smith, Gleeson & Mitchell, 2010; Noell & Burns, 2006) or evidence of teacher candidate learning outcomes from their programs (Pecheone & Chung, 2006). Recent research shows that the relationships between teachers and their students have many complex impacts on the students (Roorda, Koomen, Spilt, & Oort, 2011). However, the complexity of factors that may influence students' learning outcomes makes assessment of these influences very difficult.

To address this complexity, we propose to envision student-learning probabilities from the perspective of imaging of the teacher. When we engage in imaging, we consider the essential characteristics that would identify what is required to meet a goal. In this instance, we consider what characteristics are required for a teacher who can make student learning their highest priority. That is, if the teacher has the skills and dispositions to focus on student learning rather than focusing on their teaching, it seems logical that their instructional actions will be different. These actions will support improvements in student learning. Our purpose, then, becomes the task of uncovering the beliefs of knowledgeable professionals about what skills and dispositions they felt were characteristic of teachers who focus their instructional efforts on ensuring that students learn. To frame a research question, we juxtaposed these characteristics against those of a less mature teacher, who might focus on teaching as opposed to focusing on students' learning. Therefore, we envisioned this change in professional focus as a shift in thinking and asked the question, "What skills and dispositions characterize a teacher who has shifted their focus from their teaching to their students' learning?" Secondary to this initial question was an interest in considering possible growth points in a teacher's career where such a critical shift in their focus could be expected to occur as a function of professional development. Since the focus on students' learning is not an absolute, we could expect that a maturing teacher would become increasingly focused on students' learning, as opposed to being focused or not focused. We asked, therefore, "Do mature teachers have a stronger focus on student learning than less mature teachers?"

Perspectives and Theoretical Framework

Teacher preparation programs attempt to expose pre-service teachers to the practices, accreditation requirements, and continuous climate of performance assessments that characterize the profession of teaching (LeCornu & Ewing, 2008). Various jurisdictions across Canada do this through programs that have a variety of structures and timelines, including part-time

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programs, single year programs, two years of preparation, and concurrent programs. Programs typically include an apprenticeship element or practicum component, sometimes supported by ongoing mentorship through individual or small group connections with a faculty advisor. These counseling-mentorship supports may be on-line chat groups. However, it is evident that teacher preparation programs acknowledge the limitations of the program time, and access to pre-service teachers, as factors in determining the extent to which pre-service teachers can be prepared for the complex realities of professional responsibilities in a classroom (Darling-Hammond, 2010). Graduates of all teacher preparation programs require and receive further support in their professional preparation after graduating from their program through professional development available to all teachers or through specialized supports made available to new teachers. The hiring practices of a school jurisdiction, the induction processes used by employers, the novice teacher induction supports available to new teachers within a school, the on-going professional development available to teachers during employment, and the career trajectory aids made available to experienced teachers are all part of the preparation of teachers to manage the challenging task of ensuring student learning.
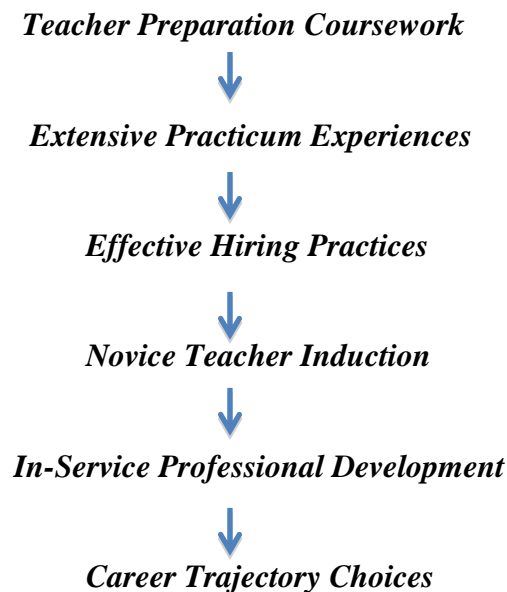
A critical part of maximizing the impact of all of the teacher preparation supports available to teachers throughout their careers should be focused on a single shift in teachers' thinking. As increasingly shown in research studies, this shift is being described as growth in teachers' skills, allowing them to shift from focusing on their teaching toward focusing on their students' learning (Darling-Hammond, 2000; Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2007; Coltfelter, Ladd, & Vigdor, 2007; Wilson, Floden, & Ferrini-Mundy, 2001). On a minute-to-minute basis in the classroom, teachers must make instructional decisions. Teachers may need to learn to make each instructional decision on the basis of its impact on students' learning (Abbot, 1991; Darling-Hammond, 1992) and to be prepared to contribute to students' learning (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2007; Darling-Hammond, 2006). Increasingly, teachers have been called upon to demonstrate public accountability by showing the impact of their instructional decisions in terms of student performance data (Stratham & Ware, 2001). While efforts to collect student performance data in the classroom may be authentic and focused on big ideas, enduring understandings, holistic goals that influence attitudes and beliefs (e.g., knowing, doing, being), the measurement of instructional impact also serves other masters. Public accountability requirements have resulted in practices that reflect the accumulation of hard data that can be reported in absolute numbers, such as percentages or numbers of students meeting standards, to address public confidence in the educational system.

Classroom testing is often used to amass this type of data and the testing in some contexts may include high stakes (pass-fail) single event opportunities for students to demonstrate learning. Teachers faced with this disparity in messages about the purposes and processes of assessment and the types of data that appear to be given status and value as evidence of student learning, receive confusing messages about their professional role. Authentic assessment foci direct teachers' attention toward the learning. Accountability focused assessment directs attention toward the teaching. This disparity may make the professional maturation of a teacher more difficult than it should be and may delay or derail the critical shift in teachers' growth required to ensure that teachers' instructional decisions are filtered through their ability to impact students' learning (Maynes & Hatt, 2013).

Darling-Hammond (2010) identified strong clinical practice, strengthened coursework that focuses on student learning and development, and opportunities to connect coursework in teacher preparation directly to practice in much more extensive practicum experiences as critical

aspects of effective teacher development that have the potential to produce this shift in the teacher's focus. This continuum of teacher preparation needs to be focused on maximizing its various stages' (Figure 1) and their respective contributions to the professional maturity of the teacher. Teacher growth is the result of pre-service learning, hiring practices, novice teacher induction, in-service professional development, and career trajectory choices. These teacher preparation approaches need to be coordinated to provide a single clear message about the goal of all instructional efforts; student learning. Such development may not occur to its full extent in the teacher preparation program but may result from later professional development at some point in a continuum of growth. However, many researchers (Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2007; Darling-Hammond, 2006; Darling-Hammond & Bransford, 2005) identify well designed practicum experiences and opportunities to connect theory to practice as essential skills will help new teachers feel better prepared to contribute more to student learning.

Figure 1: The Various Stages of Professional Growth to Teachers' Professional Maturity

Teacher Preparation Coursework

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Extensive Practicum Experiences

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Effective Hiring Practices

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Novice Teacher Induction

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In-Service Professional Development

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Career Trajectory Choices

In order to re-conceptualize our vision of teacher preparation as a continuum of supports that focus all efforts on the professional goal of improving students' learning, a theory of how to do this is needed. Theory provides the capacity to conceptualize phenomena in sophisticated ways (Trier, 2009) and increases our focus of efforts from disparate sources of professional support. If researchers understand the elements that create or contribute to the shift in teachers' focus towards students' learning, we can support teachers' professional growth more effectively (Chen & Rossi, 1983; Donaldson, 2007; Rogers, Hacsi, Petrosino & Huebner, 2000; Coulter, 2010). Our investigational focus then becomes: *What are the elements that characterize a teacher's shift in focus from focusing on their teaching to focusing on students' learning?* If we can identify these elements, we have a unique opportunity to align the various stages of their professional growth to achieve a conceptually unified focus of efforts. Such a view of the

characteristics that contribute to a teacher's professional maturity would help teacher educators and professional developers focus on the importance of teachers' access to knowledge about teaching (Darling-Hammond, 2000; Wilson, Floden & Ferrini-Mundy, 2001).

Before we turn our attention to identifying how we went about conceptualizing this shift in professional focus for teachers, it is necessary to address the role of the apprenticeship and practicum experiences that are an element of teacher preparation (Darling-Hammond, 2010). Induction mentorship is also becoming increasingly common and even legally mandated in some jurisdictions as a stage of professional development of new teachers (Ontario Ministry of Education, 2010). This practice seems to be well founded in research. Teachers are more likely to address substantive changes in their professional performance if they have access to the professional practices of other teachers (Coulter, 2010). The value of having the professional guidance of a mentor teacher focused on a conceptualized end product that represents a shared vision of the desired learning of the novice teacher is strongly evident in research (Fullan & Langworthy, 2014; Schmoker, 2005). Higher student achievement is affected by several kinds of teacher characteristics (i.e., teacher's experience, test scores, and regular licensure all have positive effects on student achievement) (Clotfelter, Ladd, & Vigdor, 2007; Boyd, Lankford, Loeb, Rockoff, & Wyckoff, 2007). Therefore, if everyone is working toward the same learning goals for the teacher candidate in their practicum and in their novice teacher mentorship, the outcomes are more likely to be achievable. If teacher associates, faculty advisors, and mentors understand the common elements to be addressed in the new teacher's learning, they have a better chance of ensuring that learning, avoiding conflicting messages about priorities, and optimizing learning time during both practicum and in-service observation opportunities. The vision becomes the direction, and the direction becomes the filter for learning efforts. If these apprenticeship opportunities are further aligned with the other aspects of teacher preparation (Figure 1), the impact is optimized, and the priorities of the profession are clear to all stakeholders. While this may seem like an oversimplified approach to reaching the end goal of optimizing student learning, the following ideas will provide an expanded vision of the elements that are part of the professional shift in thinking that is required of teachers and the complexities of this vision (Le Cornu & Ewing, 2008) will be presented.

Methods

This article outlines the outcomes of the first year of a three-year study. Over the three years of the study, we will attempt to 1) identify the elements conceptualized to represent a shift in teachers' professional focus from focusing on their teaching to focusing on students' learning, 2) work with various jurisdictions that include a faculty of education and coterminous school boards to identify hiring, induction, and in-service practices that support the conceptualized shift in teachers' professional focus, and 3) work with personnel in these jurisdictions to strengthen the vision and focus of support efforts provided along the teacher professional growth continuum to ensure a sustained and explicit focus on professional growth that will support students' learning.

During the first year of the study, our purpose was to clarify the perceived elements of the professional shift in focus that moves from focusing on teaching to focusing on students' learning. We felt that faculty advisors working with pre-service teachers as both instructors in their professional preparation programs and mentors/evaluators within the context of their practicum experiences were in an ideal position to provide insights based on their observation of

several pre-service teachers both academically and professionally. Therefore, using a purposeful sampling approach, a group of seven faculty members who served in both of these roles was invited to participate in a focus group investigation. In the university context that was used in this study, these seven people were the only people among the faculty who served in both roles. All seven members of this group agreed to participate in this study. Research ethics approval was sought and given to interview and transcribe data from these sources for the purpose of conceptualizing the elements that may be attributes of a teacher's professional focus on students' learning.

In focus group discussions, these faculty advisors engaged in a conversational interview approach and qualitative research methodology to address a prompt that directed their conversation. During three focus group meetings, participants were led to consider the elements of practice and provide examples they had observed that would provide evidence of pre-service teachers who had made a professional shift in their thinking from focusing on their teaching to focusing on students' learning. During the three focus group meetings, each approximately 90 minutes long, researchers made audio-recordings of the discussions and made summative notes of key points. Following each meeting, the researchers transcribed recordings and examined data for recurring themes and observations (Creswell, 2012). Transcriptions were presented to focus group participants at each successive meeting for the purposes of verification, clarification, and member checking.

As recurring themes were evident in transcriptions and supported by follow-up discussions, saturation of ideas was reached. Ideas were repeated and reinforced with further examples from the experience of various participants. The decision was made to attempt to capture the main points of discussions in a diagram that would represent the elements of teachers' conceptual shift in focus for ease of access by a broad audience. This accessibility was necessary to move the study into its second year and provide background concepts to a broader audience and more diversified set of participants. The resulting diagram has the value of capturing program theory in an easy to access and understand format. It also provides a conceptual approximation of how a program should operate to its optimal strength as program efficacy might then be achieved by conceptualizing the influences on program functions and by identifying their potential impacts (Chen & Rossi, 1983; Donaldson, 2007; Rogers, Hacsi, Petrosino & Huebner, 2000; Coulter, 2010).

An additional and critical advantage of the conceptual diagram is to provide a filter for the efforts that should *not* become central aspects of the limited resources in time and funding available along the teacher maturation continuum (Figure 1). While many current in-school professional development efforts involve professional learning communities, focus on student achievement, and examine ways to improve student achievement (Abbot, 1991; Darling-Hammond & Snyder, 1992; Darling-Hammond & Goodwin, 1993; Little, 1990; Strathan & Ware, 2001; Coulter, 2010; Grossman, Wineburg & Woolworth, 2001; McLaughlin & Talbert, 2001; Rozenholtz, 1991), these efforts have competition. There is a tendency to focus some professional time and attention on current "hot" topics that may be characterized by narrowness of vision or a focus on one population or a single issue to the detriment of a broader focus on student achievement regardless of the issue or population. As new trends are highlighted in teacher preparation contexts, the larger vision of preparing teachers to impact students' learning can be submerged. Cochrane-Smith and Power (2010) identify ten such emergent trends in teacher preparation. While some of these trends incorporate a focus on students' learning, an equal number of emerging trends do not. In a recent research report Henry, Bastien, and Fortner

(2011) conclude from their work that "…in light of novice teachers' significant capacity for growth, improving their initial effectiveness as rapidly as possible seems to us to offer the greatest promise for improving student performance" (p. 279). The conceptual diagram provides a broader vision of strategies to extend the student learning focus of teachers at all levels of their careers (Timmons, 2009; Jordan & Stanovich, 2004). It has the potential to become the overarching framework that can provide filters to direct time, resources, and professional energy to the most promising aspects of the complex dynamics in schools.

Results

After three focus group meetings with the seven participants in the first phase of this study, their ideas were captured in diagram format. This study started with the premise that during their tenure as teachers, continuous growth and maturation as a professional will result in a shift in professional focus away from teaching actions and toward students' learning. All participants in the focus group discussions had experience as classroom teachers, faculty of education professors engaged in teacher preparation programs, and faculty advisors involved in practicum supervision including mentoring. All participants unanimously agreed that this shift in teachers' focus is a characteristic that reflects the teacher's increasing professional maturity. Their involvement in the focus group discussions was indicative of their willingness to examine the impact of specific activities on performance and their belief in the necessity of improvements in teaching as a professional characteristic (Allen, 2004). All participants agreed that a clearer conception of the elements that contributed to a professional focus on learning was timely and necessary as a filter for program improvement efforts in a pre-service context. Willingness to participate in this research was also indicative of participants' belief that individual actions and dispositions are critical to creating a focus on students' learning. In the program change process, a positive program change would include application of a consistent vision of the elements present when teachers focus on learning (Maynes & Hatt, 2011). The conceptions that resulted from this first phase of our research will help us frame the next two years of this study to see learning as a function of teaching (Phelan, 2009) rather than as a function of students' efforts to learn and to see the enterprise of teaching as "a site of possibility" (Phelan, 2009, p. 106) to influence learning.

The elements of the shift in focus towards focusing on students' learning are presented here in the form developed through focus group interaction (Figure 2).

Figure 2.

Elements Evident When Teachers Have Made a Conceptual Shift from Focusing on Teaching to Focusing on Students' Learning
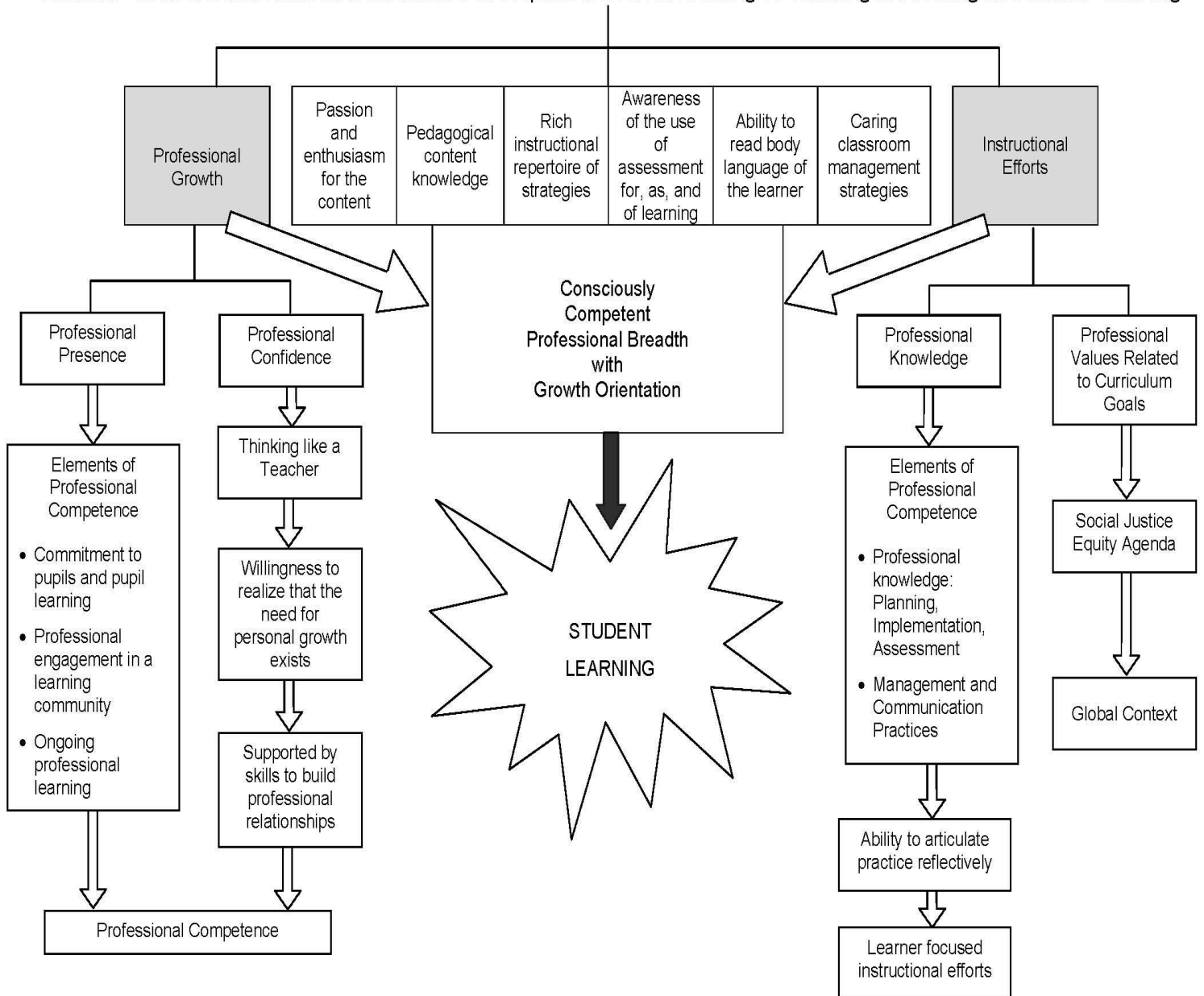
To create this schematic, data collection, analysis, and conceptual formulation were connected in a reciprocal and recursive sense. Examination of emerging themes during the different meetings provided opportunities for participants to guide analysis and facilitate the process of diagramming. The diagram was subjected to the four requirements identified by Strauss and Corbin (1990). Specifically, 1) the fit between the diagram and the 'shift in conception' phenomenon, including its evolution from diverse data and its adherence to the universal reality of experienced Faculty Advisors; 2) the ability of the diagram to support understanding of this shift in thinking for teachers; 3) the applicability of the conceptualizations in this diagram to broad contexts; and 4) the potential of the diagram to provide direction for its applicability and to support reasonable action related to teachers' professional growth.

Understanding the Result: A Consciously Competent Professional

The data contributes to the major theme of a *consciously competent professional*, and six additional attributes necessary to be defined in this manner, along with supporting skills, attitudes, and dispositions. The central element in this shift was identified as the conception of a consciously competent professional, with professional and instructional breadth and growth orientation. This person's focus of instructional and professional actions would improve students' learning. According to the data, the consciously competent professional teacher, who focuses on students' learning, would require a cadre of attributes to support instructional efforts. These characteristics include: passion and enthusiasm for the subject content, pedagogical content knowledge, rich instructional repertoire of teaching strategies, awareness of the various productive ways that assessment data can be used, sophisticated ability to read the body language of the learner, and caring classroom management strategies.

Passion and enthusiasm for the subject matter provide a platform for engaging students' interest. By demonstrating this passion and enthusiasm, the teacher motivates and provides reasons for students to attend to new ideas. Teachers develop engaging learning strategies when they have an interest in a topic and students benefit from having high levels of interest involved. Both positive and negative teacher-student relationships have been shown to have medium to large impacts on students' engagement (Roorda, Koomen, Spilt, & Oort, 2011).

Pedagogical content knowledge is a level of comfort and familiarity with a topic that allows teachers to engage examples and non-examples and to explain, clarify, and expose students to complex opportunities to consider consolidations and applications. Consolidation and opportunities to apply learning support students' internalization of new ideas. This attribute allows teachers to anticipate common misconceptions and provide learners with opportunities to examine and consider various aspects and perspectives about a topic. Strong pedagogical content knowledge allows teachers to differentiate effectively because they can provide variations within the scope of central ideas to respond to students' interests, learning profiles, prior learning, and readiness.

A necessary attribute of teachers who focus on students' learning is *a rich instructional repertoire of strategies* for use during the instruction, consolidation, and application components of lessons. Being able to vary approaches allows teachers to provide learning opportunities that maximize students' ability to learn through their preferred learning styles. The ability to select direct instruction through modeling, or to choose from among a rich variety of indirect approaches such as project-based learning, problem-based learning, cooperative learning, web quests, or inquiry, provides both exemplar exposure and experiences to support internalization of

central concepts.

Awareness of the possible uses of assessment is an essential attribute of the teacher. Teachers who focus instructional efforts on students' learning arrange opportunities to gather assessment data *for, as* and *of* learning (Earl, 2008; Earl, 2010) and include assessment that is embedded and non-intrusive. The learner has a role in self and peer assessment. Learning and assessment of the learning become seamless.

Teachers who focus on students' learning can *read the body language of the learner.* This body language provides early signals that learning is happening or that the student's grasp of the learning is problematic. The ability to understand the body language of the learner allows teachers to adjust learning opportunities through "reflection-in-action" and remain sensitive to the potential for adapting content, processes, or products to improve learning.

Caring classroom management strategies are essential to ensuring the preeminence of learning as a focus in the classroom. Through the appropriate, supportive, and proactive use of rules and routines in the classroom, teachers who focus on students' learning ensure that learning time is optimized, that the focus on learning is a central filter for all decisions, that learning happens in responsive and flexible environments, and that respect for individuals is the guiding premise.

All six of these attributes must be present for a teacher to be considered consciously competent professional. These essential attributes are expanded and enriched by *professional presence* and personal *professional confidence.*

A teacher's *professional presence* in the classroom projects a sense that the teacher is in charge, has a direction and is guided by a sense of purpose. Elements of professional competence that relate to a teacher's professional presence include: their commitment to students and their learning, their engagement in a professional learning community through cooperative professional growth, and their commitment to ongoing professional learning. Conscious competence is deepened by the person's ability to think like a teacher. This ability to think like a teacher includes their ability to focus efforts on issues and strategies that can impact students' learning and expanding their conceptual repertoire of professional knowledge to encompass concepts that enable the operation of effective practice. Being open to professional growth is critical to the teacher's ability to expand their realization of the need for personal growth and extend their capacity and willingness to grow. Professional growth is seen as a function of the desire to improve student learning. Recent research (Henry, Bastian, & Fortner, 2011) reports the tendency of teacher growth, as measured by increases in their students' learning, plateaus after their third year of teaching. However, professional growth that is supported by the interpersonal skills to build professional relationships may offer support for continuous growth (Figure 1) that is reflected in the teachers' actions and measureable in the students' achievement data. These supports may further professional growth through cooperative stimulation and constructive peer mentoring and collaboration. Professional competence is the outcome of the coexistence of professional presence and professional confidence.

Professionally competent breadth with a growth orientation is supported by the teacher's instructional efforts and the cadre of skills they develop to support these efforts. Instructional efforts are enriched by the teacher's professional knowledge and their professional values in synchronization with curriculum goals. Elements of the teacher's professional knowledge include their knowledge of effective curriculum planning, implementation, and assessment, as well as their management and communication practices with related stakeholders such as students, parents, guardians, support agencies, care providers, administrators, and policy makers.

In a learner-focused environment, the teacher's ability to reflect and articulate their professional practice is key to their ability to use, improve, expand, and actualize practice when needed. When the teacher can name and describe what they do, they have the advantage of reflective and responsive use of what they do. Reflection allows the teacher to understand the impact of specific actions in an instructional context on specific outcomes in student learning. When all instruction is focused on what the student is learning in relation to the time and effort spent, an economy of effort characterizes the instruction. The instruction becomes responsive and learner focused.

The cadre of specific skills and a set of professional values that synchronize to the current curriculum goals of the jurisdiction support instructional efforts. Each curriculum guideline identifies knowledge, skills, and values that are contextualized in the expected learning outcomes of the jurisdiction. The teacher who has made the conceptual shift toward focusing on students' learning will be able to understand, teach, and exemplify the values that are espoused in a guideline. These values will often relate to the big ideas or enduring understandings of the subject. Additionally, they reflect the commonly espoused values of the community and evolve in the context of general social awareness. These values will include and are encompassed by a social justice equity agenda and relate to the global context. The professional values related to curriculum goals that are held by the teacher will be reflective of the inclusive social objectives of the era. They will be understood and modeled for students in the classroom context. The classroom norms of behaviour are used to model and practise the predominant social norms of the society.

The diagram (Figure 2) represents the conceptual shift at end point. Thus, the elements presented in the diagram represent the attributes that require development in order to make the conceptual shift from focusing on teaching to focusing on student learning. The diagrammatic conception can be used broadly in pre-service and in-service contexts to guide professional discussions, growth plans, professional evaluations, and school improvement efforts. It has the potential to provide direction about reasonable actions related to teachers' professional growth along the continuum from pre-service preparation to professional maturity. In addition, the conceptual diagram allows researchers to consider the potential impact of situational factors such as the curriculum, work factors, resource limitations, space constraints, the learning setting, the interest of the students, classroom disruptions, the intensity of reform on student learning (Kennedy, 2011) and to consider how "fundamental attribution error" (p. 597) may cause assignment of some effects to the wrong causes. The details of the conceptual diagram provide specific and particular direction about theorized attributes that may promote learning. Such details provide structure for further investigation.

If this diagram was used to inform the next transition in teaching from the pre-service program to hiring, hiring practices could be anticipated to change significantly. For example, interview methods might include examination of the candidate in a classroom context to determine the extent of their focus on students' learning (Maynes & Hatt, 2014). Additionally, interview questions might change in focus. Performance based questioning that attempted to determine the candidates' skill from anecdotes about past experiences would provide indicators of the candidate's ability to sustain a focus on learning. Questions could be generated directly from the conceptual diagram and concentrate on the main elements of the teacher's professional knowledge and dispositions, their professional growth, and instructional efforts, beliefs, and commitments. These questions could be designed to target the outcome of student learning. This extension is the focus of the second year of this research study, now underway. By extension, the

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conceptual diagram provides a framework for interviewers to filter interviewee responses to questions; the "look-for's" of the answers. Similar applications could be anticipated to support design of induction programs for novice teachers, in-service programs, and career trajectory paths.

Scholarly Significance

This research had two purposes: to identify teacher characteristics that might influence students' learning; and to establish a framework to support ongoing research related to the professional maturation of teachers. Both of these purposes have been summarized in diagram format. A diagram has the potential to capture the unique features of a concept in relation to each other and to inform future actions. For these purposes, Figures 1 and 2 were designed. By providing the key concepts in diagram form, researchers have tried to capture key characteristics and support plans for future research in easily accessible format.

Figure 2 anticipates teachers' instructional actions with corresponding positive changes in students' performance when the program elements at the pre-service, hiring, novice teacher induction, in-service, and teacher career trajectory paths are considered (Elsmore, Peterson & McCarthy, 1996; Coulter, 2010). The diagram is timely as this investigational focus is also the subject of a very large meta-analysis of previous research to identify correlated impacts on students' learning (Roorda, Koomen, Spilt, & Oort, 2011). Second, the diagram is the schematic that informs the next two phases of our research.

During year two of this project, researchers will partner with several school boards that have coterminous faculties of education. We intend to examine the pre-service programs to determine the extent to which pre-service courses are addressing the elements conceptualized to contribute to a shift in teachers' professional focus. This aspect of the research will be discussed by examining course outlines against an analysis framework reflective of the diagram (Figure 2) and interviewing a sample of faculty to determine their beliefs and instructional goals within the pre-service program. Hiring practices within coterminous boards will be examined. In-service opportunities within the boards will be investigated to determine their contribution to the elements. Novice teacher induction and mentoring programs will be reviewed for their goals and activities to align these programs with the conceptual elements that contribute to a shift in professional focus. Finally, teachers in later years of their career will be interviewed to determine the nature of the supports they seek and acquire to extend their career trajectories, and the extent of alignment of these trajectories to the elements of the shift in focus will be determined.

During the final year of this project, researchers will work with coterminous faculties of education and school boards to plan for the alignment and improvement of teacher preparation supports. Alignments and improvements are anticipated to have an impact on student learning. Strengthened student learning is the goal of school improvement. We expect that our research will support ways that professionals go about this enterprise in the future. In the words of Coulter (2010), this study should "restore the logic chain of program theory" in relation to the alignment of teacher education and professional growth. This research agenda provides a fit between the conceptual diagram that describes elements of teachers' professional shift in focus and the professional growth continuum for teachers. It has the potential to provide direction for reasonable action related to the examination of a consistent message about what is valued in teachers' professional growth (Strauss & Corbin, 1990). The conceptions presented in this paper have also been used to develop a book about alternatives ways that school boards could address

the hiring of new teachers (Maynes & Hatt, 2014).

Instruments and processes to help examine the continuum of teacher growth will be developed over the next year. The consistency of underlying conceptions for each stage of the process of teacher development will be central to the examination of artifacts and the design and analysis of interview data. It is our hope that Figure 2 will become a schema for visioning by those who provide services to the profession of teaching. It should also provide a valuable reference for those who wish to focus on student learning as the central element of pre-service program renewal and school improvement. In the words of Mitchell and Sackney (2009), "Awareness is the beginning but it can't be the end, so it is critical that there are strategies in place for people to move forward" (p. 90).

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