



Ontario
College of
Teachers

Ordre des enseignantes
et des enseignants
de l'Ontario

Additional Qualification Course Guideline Computer Studies, Specialist

**Schedule D
Teacher's Qualification Regulation**

June 2019

Ce document est disponible en français sous le titre *Ligne directrice du cours menant à la qualification additionnelle : Informatique, spécialiste*, juin 2019.



Table of Contents

1. Introduction.....	1
2. Conceptual Framework.....	2
3. Professional Identity and the Vision of the Learner	4
4. Regulatory Context	6
5. Foundations of Professional Practice	7
6. Pedagogical Inquiry Framework	8
A. The Ethical Standards for the Teaching Profession and the Standards of Practice for the Teaching Profession	9
B. Guiding Concepts for Pedagogical Inquiry.....	10
C. Ontario Context: Curriculum, Policies, Legislation, Frameworks, Strategies and Resources.....	12
D. Theoretical Foundations of Computer Studies, Specialist.....	13
E. Program Design, Planning and Implementation	14
F. Leadership in the Instructional Setting.....	16
G. Reflecting, Documenting and Interpreting Learning.....	18
H. Shared Responsibility for Learning.....	18
I. Research, Professional Learning and the Scholarship of Pedagogy	19
7. Instructional Design and Practices in the Additional Qualification Course: Computer Studies, Specialist	20
8. Assessment and Evaluation of Candidates	22

Additional Qualification Course Guideline for Computer Studies, Specialist

1. Introduction

Additional Qualification courses support educators in creating a safe, inclusive and welcoming learning environment and provide the context for educators to explore the professional knowledge and practices needed, as they strive to honour the strengths, interests and needs of every student.

Creating inclusive learning environments requires the commitment of all partners – teachers, students, families, guardians, caregivers and the community. This vision of inclusivity, as well as working to sustain it, requires ongoing effort and shared responsibility. This involves collectively and critically reflecting on the impact of policies, practices and processes on inclusive learning environments.

The following critical reflections (Figure 1) may guide educators in creating and sustaining a vision of inclusive education:

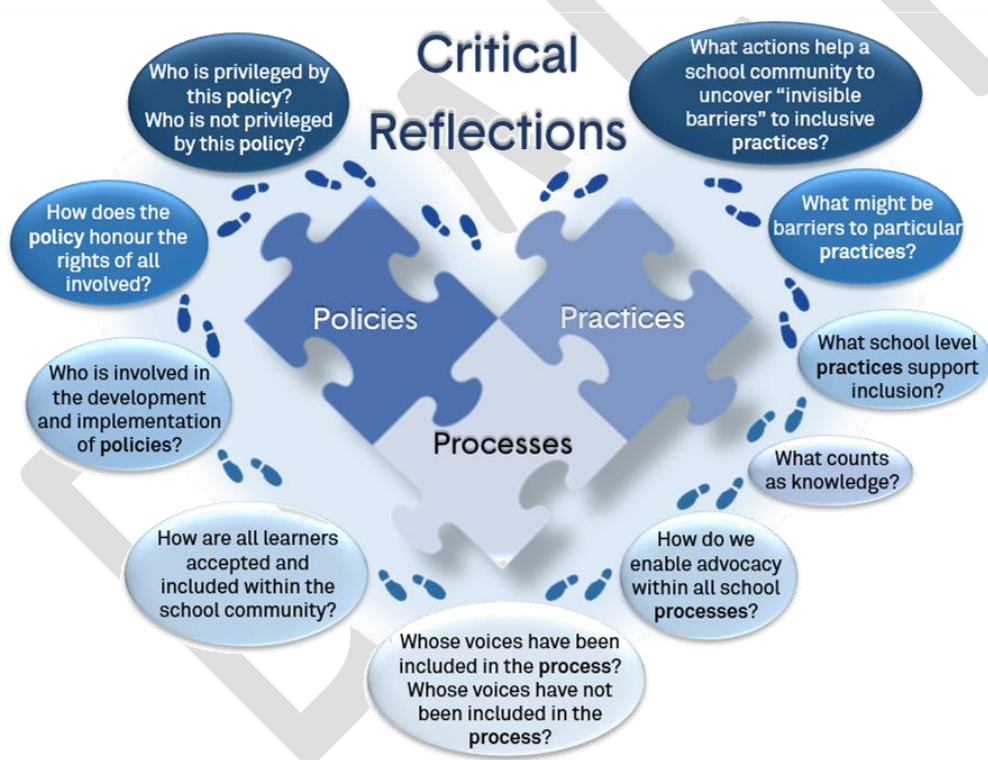


Figure 1: Critical Reflections

2. Conceptual Framework

The Schedule D *Computer Studies, Specialist* Additional Qualification course guideline provides a conceptual framework for providers and instructors to develop and facilitate the Schedule D *Computer Studies, Specialist* course. This guideline framework is intended to be a fluid, holistic and integrated representation of key concepts associated with *Computer Studies, Specialist*.

The Additional Qualification course guideline for *Computer Studies, Specialist* is organized using the following conceptual framework (Figure 2),

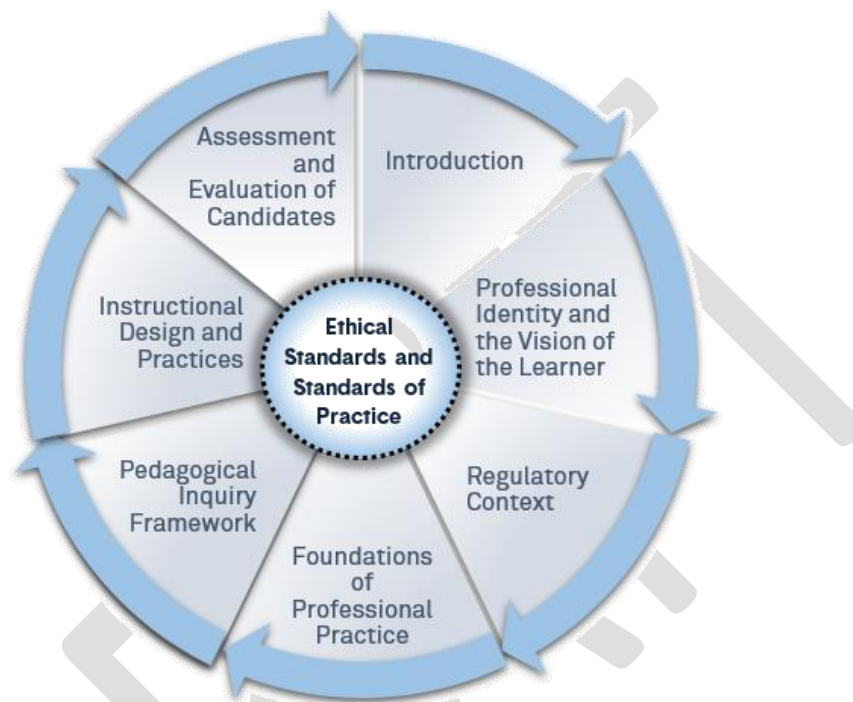


Figure 2: Conceptual Framework

Three-session specialist Additional Qualification courses identified in Schedule D (Teachers' Qualifications Regulation 176/10) are designed for:

- critically exploring and enhancing professional practices, critical pedagogies, knowledge and skills as outlined in the *Computer Studies* course (Part I)
- critically designing, applying and facilitating dialogue related to learning opportunities that integrate the professional knowledge, skills and pedagogical stances as outlined in the *Computer Studies* course (Part II)

- critically and collaboratively cultivating professional efficacy, emancipatory leadership practices and advancing the scholarship of teaching by fostering cultures of critical reflection and inquiry as outlined in the *Computer Studies* course (Specialist).

The Additional Qualification Course: *Computer Studies, Specialist* employs a critical, pedagogical lens to explore in a holistic and integrated manner theoretical foundations, learning theory, program planning, development and implementation, instructional design and practices, assessment and evaluation, the learning environment, research and ethical considerations related to teaching and learning within and across the divisions. Through these explorations, candidates strengthen professional efficacy by gaining in-depth knowledge, refining professional judgment and generating new knowledge for practice.

Additional Qualification Course Implementation

Course providers, instructors and developers will use this Additional Qualification guideline framework to inform the emphasis given to key guideline concepts in response to candidates' diverse professional contexts, knowledge, skills and understandings.

Critical to the holistic implementation of this course is the modeling of a positive learning environment that reflects care, diversity and equity from an asset-based and ethical lens. This course supports the enhancement of professional knowledge, ethical practice, leadership and ongoing professional learning.

The Ontario College of Teachers recognizes that candidates working in the publicly funded school system, independent/private institutions or First Nations schools will have a need to explore topics and issues of particular relevance to the context in which they work or may work.

Provincial Context

The French language and the English language communities will also need to implement these guidelines to reflect the unique contextual dimensions and needs of each community. Each of these language communities will explore the guideline content from distinct perspectives and areas of emphasis. This flexibility will enable both language communities to implement *Computer Studies, Specialist* as understood from a variety of contexts.

Educators in Ontario work in varied and diverse educational contexts. Educators may find themselves in a variety of educational settings such as: a rural French language school, a Catholic school, an urban public school, a

First Nation school, a provincial school, a private or independent school. Educators will reflect on the unique context of each community to enhance learning, and well-being.

In this document, all references to “candidates” are to educators enrolled in the Additional Qualification course. References to “learners” indicate those enrolled in school programs.

3. Professional Identity and the Vision of the Learner

The professional identity of the Additional Qualification course instructor and course candidates conveyed in this Additional Qualification course guideline reflects the vision of the educator articulated in the *Ethical Standards for the Teaching Profession*, the *Standards of Practice for the Teaching Profession* and the *Professional Learning Framework for the Teaching Profession*, as well as through Additional Qualification consultations.

This vision of the educator (Figure 3) positions professional educators as innovative scholars and practitioners, critical pedagogues who forward social and ecological justice, as well as:

DRAFT

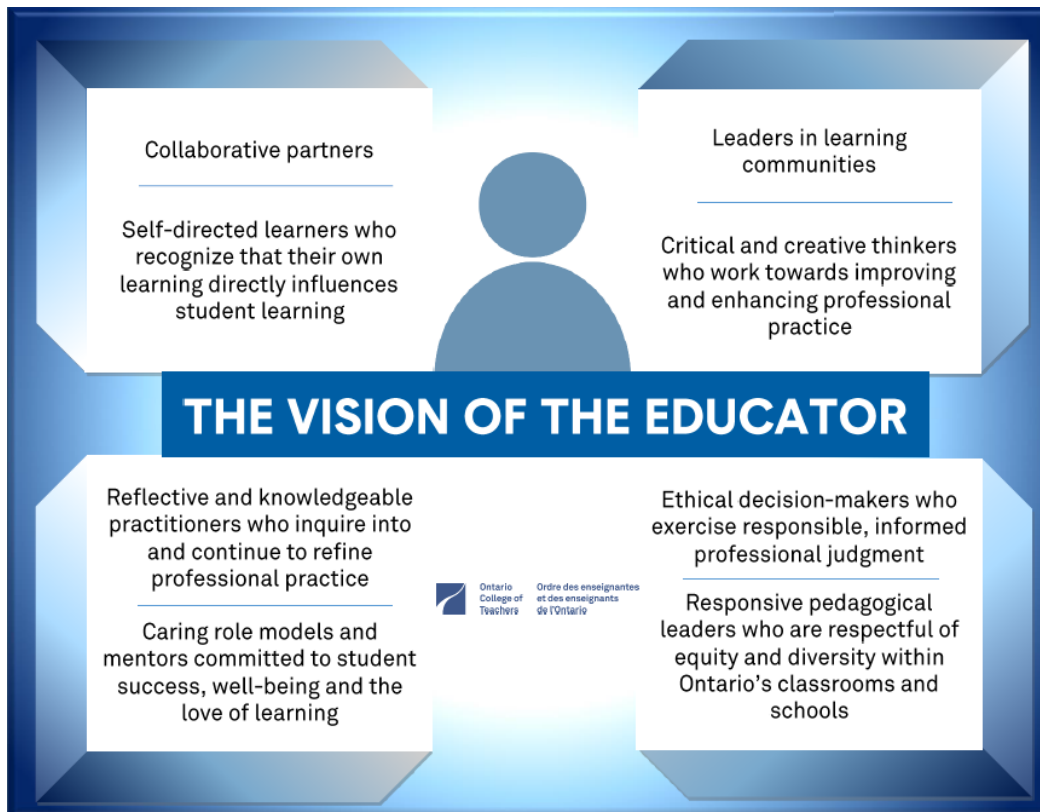


Figure 3: Vision of the Educator¹

The learner conveyed in this Additional Qualification (Figure 4) is empowered, independent, a democratic citizen, knowledgeable, creative, collaborative, a critical thinker, ethical, reflective, accepting, inclusive, courageous, self-efficacious, a problem-solver, and whose voice, perspectives and sense of efficacy and agency are integral to shaping the teaching and learning process.

¹ Note. From “The Foundations of Professional Practice,” by Ontario College of Teachers, 2016, p. 16. Copyright 2016 by Ontario College of Teachers. Reprinted with permission.



Figure 4: Vision of the Learner

4. Regulatory Context

The College is the self-regulating body for the teaching profession in Ontario. The College's responsibility related to courses leading to Additional Qualifications includes the following:

- to establish and enforce professional standards and ethical standards applicable to members of the College
- to provide for the ongoing education of members of the College
- to accredit Additional Qualification courses and more specifically,

The program content and expected achievement of persons enrolled in the program match the skills and knowledge reflected in the College's "Standards of Practice for the Teaching Profession" and the "Ethical Standards for the Teaching Profession" and in the program guidelines issued by the College. (Regulation 347/02, Accreditation of Teacher Education Programs, Part IV, Subsection 24).

Additional Qualifications for educators are identified in the *Teachers' Qualifications Regulation* (Regulation 176/10). This regulation includes courses that lead to Additional Qualifications, the Principal's Development Qualification, the Principal's Qualifications, the Primary Division, the Junior Division and the Supervisory Officer's Qualifications. A session of a course leading to an Additional Qualification shall consist of a minimum of 125 hours as approved by the Registrar. Accredited Additional Qualification courses reflect the *Ethical Standards for the Teaching Profession*, the *Standards of Practice for the Teaching Profession* and the *Professional Learning Framework for the Teaching Profession*.

The Additional Qualification course developed from this guideline is open to candidates who meet the entry requirements identified in the *Teachers' Qualifications Regulation*.

Successful completion of the course leading to the Additional Qualification Course: *Computer Studies, Specialist*, listed in Schedule D of the *Teachers' Qualifications Regulation*, is recorded on the Certificate of Qualification and Registration.

5. Foundations of Professional Practice

The *Foundations of Professional Practice* conveys a provincial vision of what it means to be an educator in Ontario. This vision lies at the core of educator professionalism. The *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession* (see Appendix 1) are the foundation for the development and implementation of the Additional Qualification course. These nine standards, as principles of professional practice, provide the focus for ongoing professional learning in the Additional Qualification Course: *Computer Studies, Specialist*. In addition, the *Professional Learning Framework for the Teaching Profession* is underpinned by the standards, articulates the principles on which effective educator learning is based and acknowledges a range of options that promote continuous professional learning.

The ongoing enhancement of informed professional judgment, which is acquired through the processes of lived experience, inquiry and critical reflection, is central to the embodiment of the standards and the *Professional Learning Framework for the Teaching Profession* within this Additional Qualification course and professional practice.

The *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession* serve as guiding frameworks that underpin professional knowledge, skills and experiences that educators

require in order to teach effectively within and contribute to an environment that fosters *respect, care, trust* and *integrity*.

Teacher Education Resources

The College has developed resources to support the effective integration of the standards within Additional Qualification courses. These teacher education resources explore the integration of the standards within professional practice through a variety of educative, research and inquiry-based processes. These resources can be found on the College web site: <http://www.oct.ca/resources/categories/professional-standards-and-designation>.

These teacher education resources support the development of professional knowledge, judgment and efficacy through critical reflective praxis. The lived experiences of Ontario educators are illuminated in these teacher education resources and serve as key supports for Additional Qualification courses.

6. Pedagogical Inquiry Framework

The pedagogical inquiry framework (Figure 5) for *Computer Studies, Specialist* supports a holistic, integrated, experiential and inquiry-based Additional Qualification Course. This pedagogical inquiry framework supports the professional knowledge, judgment, critical pedagogies and practices of course candidates.

DRAFT



Figure 5: Pedagogical Inquiry Framework for *Computer Studies, Specialist*

A. The Ethical Standards for the Teaching Profession and the Standards of Practice for the Teaching Profession

The *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession* represent a collective vision of professional practice. At the heart of a strong and effective teaching profession is a commitment to learners and their learning. Members of the Ontario College of Teachers, in their position of trust, demonstrate responsibility in their relationships with learners, parents, families, caregivers, guardians, educational partners, colleagues, other professionals, the environment and the public.

The holistic integration of the standards within all course components supports the embodiment of the collective vision of the teaching profession that guides professional knowledge, learning and practice. The following principles and concepts support this holistic integration within the Additional Qualification course:

- understanding and embodying care, trust, respect and integrity
- fostering commitment to students and student learning
- integrating professional knowledge
- enriching and developing professional practice
- supporting leadership in learning communities
- engaging in ongoing professional learning.

Course candidates will continue to critically inquire into professional practices, pedagogies and ethical cultures through professional dialogue, collaborative reflection and the lenses of the *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession*.

B. Guiding Concepts for Pedagogical Inquiry

The following theoretical concepts are provided to facilitate the holistic design and implementation of this Additional Qualification course through pedagogical and professional inquiries.

This Additional Qualification course supports critical reflective inquiry and dialogue informed by the following concepts which will be critically explored through equitable, holistic and interrelated processes:

- advancing a culture of critical inquiry that collectively examines biases, assumptions, beliefs and understandings associated with teaching and learning within the context of this Additional Qualification
- advocating for a culture in which the professional identity and practices associated with the views of educators as co-inquirers, scholars and researchers working alongside empowered learners is upheld in the co-creation of democratic, knowledge-rich learning environments
- fostering a critical community of practice that collectively examines and integrates Ontario's curriculum, policies, frameworks, strategies and guidelines
- cultivating a school and/or system culture in which knowledge of First Nations, Métis and Inuit ways of knowing, cultures, histories and perspectives are meaningfully and respectfully included in teaching and learning processes as valid means to understand the world
- fostering dialogue on the concept of cultural appropriation

- promoting a culture of shared leadership that thoughtfully examines critical pedagogy as a theoretical foundation associated with multiple ways of knowing and being in community
- collaboratively facilitating knowledge-mobilization and creation regarding the design, assessment and implementation of practices and/or programs at the local and district levels
- nurturing a culture that collectively engages in the critical examination of pedagogical processes, including assessment and evaluation practices, that link curriculum to learners' interests, strengths, inquiries, needs and well-being
- fostering a culture of critical and reflective leadership practices that is committed to creating and sustaining holistic learning environments that nurture the identities of learners and their intellectual, social, emotional, physical, linguistic, cultural, spiritual and moral development
- fostering a critical culture of practice committed to thoughtfully examining collaborative leadership with learners, in-school personnel, families, caregivers, guardians and the community to support the learning, identities and well-being of the school community
- facilitating a critical culture of pedagogical practice committed to the thoughtful examination of a variety of resources, including technological and communication resources, to enhance professional knowledge in support of learning, independence, well-being and agency
- promoting a culture of shared leadership committed to enhancing professional practice through ongoing collaborative inquiry, dialogue, reflection, innovation and critical pedagogy
- cultivating an ethical culture that openly engages in critical reflection and dialogue to enhance collective ethical leadership, ethical sensitivity and ethical efficacy
- promoting a culture of dialogue that critically addresses issues associated with environmentally sustainable practices, policies and pedagogies
- nurturing a culture of ethical leadership that critically inquires into practices to promote responsible and active environmental stewardship, ecological consciousness, social justice and democratic citizenship within local, national and global contexts

- fostering a culture of shared leadership committed to critically inquiring into the design, creation and implementation of communities of inquiry that promote transformational professional learning and collective professional efficacy
- fostering a culture of reflective practice that critically inquires into the design of innovative practices and shared leadership in the integration of information and communication technology to enhance teaching and learning
- cultivating a critical culture of inquiry that is committed to thoughtfully investigating the integration of innovative strategies for creating and sustaining safe, healthy, equitable, holistic and inclusive learning environments that honour and respect diversity, facilitate learning, foster learner voice and perspectives, encourage critical thinking and promote social justice
- fostering a culture of critical inquiry and dialogue committed to the thoughtful examination of qualitative and quantitative research that impact professional practices, policies and pedagogies in support of learning, empowerment and agency
- cultivating a culture of inquiry and dialogue that critically examines pedagogical practices, policies and curricular experiences that support learners' well-being and efficacy
- promoting a culture of interprofessional collaboration committed to critically inquiring into the collaborative development and implementation of Individual Education Plans (I.E.P.) and Transition Plans for learners that include the voices and perspectives of all those involved
- fostering a community of shared leadership committed to critically inquiring into how the school and/or system promotes openness to innovation, change, culturally-inclusive pedagogies and the democratization of knowledge
- cultivating a culture of inquiry and dialogue related to individual and systemic manifestations of power and privilege and their implications for teaching and learning.

C. Ontario Context: Curriculum, Policies, Legislation, Frameworks, Strategies and Resources

The Additional Qualification Course: *Computer Studies, Specialist* is aligned with current Ontario curriculum, relevant legislation, government policies, frameworks, strategies and resources. These documents inform the design,

development and implementation of the Additional Qualification Course: *Computer Studies, Specialist* and can be viewed at www.edu.gov.on.ca.

Course candidates are also encouraged to critically explore the policies, practices and resources available at provincial, school and board levels that inform teaching and learning related to *Computer Studies, Specialist*.

D. Theoretical Foundations of Computer Studies, Specialist

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- cultivating a culture of practice that collectively critiques various theoretical frameworks underpinning this Additional Qualification, the principles fundamental to these frameworks and their practical applications in supporting learning
- fostering a culture of critical inquiry related to theories of development and identity formation to inform practice and support learner well-being, efficacy and agency
- advancing a reflective community of practice that explores the relevance of critical pedagogy and socio-constructivist theories as theoretical foundations for this Additional Qualification
- promoting a culture of critical dialogue and inquiry that investigates current theoretical research, literature and scholarship related to this Additional Qualification
- facilitating knowledge-creation and mobilization regarding the significance of the *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession* as theoretical foundations for educator professionalism within the Additional Qualification Course: *Computer Studies, Specialist*
- nurturing a culture of critical inquiry that examines the relationship between theory and practice, as well as between practice and theory
- advancing a culture of critical pedagogy that is committed to curriculum design using learners' inquiry questions, passions and interests
- cultivating a culture of critical inquiry related to Ontario curriculum, resources and government policies, frameworks and strategies related to *Computer Studies, Specialist*
- facilitating a culture of dialogue and leadership committed to honouring learning theories and the individual learning strengths, styles and needs of learners

- fostering an ethical culture that engages in critical reflection regarding the dimensions associated with creating and sustaining safe, inclusive, accepting and engaging learning environments
- nurturing a critical community of practice that collaboratively designs holistic and inclusive educational programs, builds on learners' abilities, interests and experiences and empowers them to reach their learning goals
- promoting a culture of critical inquiry that examines the significance of relevant legislation at the municipal, provincial, federal and international levels and associated responsibilities of professional practice
- cultivating a culture of critical inquiry and dialogue that collectively explores educators' legal obligations and ethical responsibilities according to current provincial legislation and practices
- cultivating an innovative culture that explores practices for integrating artistic expression to enhance teaching and learning
- fostering a culture of critical reflection by comparing solutions using more than one programming language
- facilitating innovative pedagogical practices in the development of programs that include modularity and Abstract Data Types (A.D.T.)
- cultivating knowledge-creation and mobilization by exploring a variety of conceptual frameworks to inform computer studies
- fostering a culture of critical reflection by selecting and applying conceptual models for computer studies.

E. Program Design, Planning and Implementation

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- cultivating knowledge-creation and mobilization related to the conceptual integration of program planning frameworks that reflect the *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession*
- collaboratively facilitating critical inquiry into the design, development and implementation of programs that are responsive to society's diverse and changing nature and its influence on learning and well-being
- cultivating a culture of inquiry and innovative leadership related to program design, planning, development and implementation strategies and frameworks related to *Computer Studies, Specialist*

- creating a culture of inquiry that explores and extends understanding of the philosophical underpinnings that strengthen educators' professional efficacy to support curricular and interdisciplinary integration
- promoting a culture of critical pedagogical practice that explores various approaches to curricular integration through diverse planning models, content and resource development, pedagogical practices and the implementation of equitable assessment and evaluation practices that are fair, transparent and equitable
- cultivating a culture of critical inquiry and dialogue regarding the integration of concepts related to differentiated instruction, universal design and the tiered approach in program planning development and implementation
- promoting an innovative culture committed to research-based, leading-edge and culturally inclusive learning resources that support learning and engagement (for example, print, visual and digital)
- nurturing an ethical culture that advocates for and supports the use of a variety of assistive technologies to support learning and well-being
- promoting a culture of inquiry and innovation that supports leading-edge learning opportunities and programs that support various educational pathways and goals
- fostering shared leadership in critically exploring, developing and implementing programs that respond to learners' lived experiences, identities, narratives, development, strengths, inquiries, interests and needs
- fostering an innovative culture committed to critical and culturally inclusive pedagogies that support program design, planning and development
- facilitating knowledge-creation and mobilization related to collaborative strategies that support learners' well-being and self-regulation
- fostering a culture of shared leadership and critical inquiry related to the exploration and implementation of instructional processes that honour the learning styles, voice, perspectives, strengths and experiences of learners
- facilitating a safe, respectful and ethical school and/or system culture of learning where learners' curiosities, contexts and experiences are leveraged to promote deeper engagement and understanding of course inquiries

- promoting an innovative culture that critically inquires into various pedagogical documentation and assessment processes to advance program planning, support learning and foster engagement
- fostering a culture of critical reflection when exploring computer hardware functions, file management techniques, operation system functions and networking concepts
- facilitating the development of language independent solutions to defined situations
- supporting innovative practices by communicating an understanding of the variety of programming languages, paradigms and environments
- cultivating knowledge-creation and mobilization by demonstrating an understanding of various computer science concepts (for example, Artificial Intelligence [A.I.], Internet of Things [I.o.T.], Augmented Reality [A.R.] and Complexity theory)
- cultivating innovative practices by advancing an understanding of sorting, searching and recursion algorithms
- cultivating knowledge-creation and mobilization by supporting the advancement of a practical understanding of file input and output
- cultivating innovative practices by leading the development of programs using Abstract Data Types
- facilitating innovative practices by refining the development and testing of Graphical User Interfaces (G.U.I.) that comply with accessibility standards
- fostering a culture of critical reflection by advancing an understanding of the various strategies and tools to debug programs.

F. Leadership in the Instructional Setting

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- facilitating knowledge-creation and mobilization related to inclusive and vibrant learning environments that reflect the *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession*
- cultivating shared leadership related to creating and sustaining ethical, positive, equitable, accepting, inclusive, safe and engaging learning environments for learners, families, caregivers and guardians

- promoting a responsive culture that actively engages all members of the community, supports dialogue and collegiality and nurtures a sense of belonging
- fostering a culture of leadership focused on creating and sustaining a collaborative community of empowered and engaged learners
- cultivating a culture of critical inquiry that advocates for engaging, trusting and inviting learning environments that promote learner voice and perspectives, leadership, critical inquiry and self-regulation
- nurturing a culture of critical inquiry and innovation related to instructional strategies that support learning and well-being
- fostering a responsible culture that critically inquires into safe, ethical, legal and respectful practices in the use of different technological tools that support pedagogical practices
- cultivating a culture committed to inclusive and innovative learning environments that integrate a variety of instructional strategies to respond to the interests and needs of all learners (for example, universal design, experiential learning, differentiated instruction, inquiry and the tiered approach)
- fostering a culture of ethical leadership committed to social justice that engages learners as active, democratic and global citizens in supporting environmental, social and economic sustainability
- promoting a culture of dialogue and critical inquiry that promotes the collective professional identity and leadership of educators reflected in the *Ethical Standards for the Teaching Profession*, the *Standards of Practice for the Teaching Profession*, the *Professional Learning Framework for the Teaching Profession* and the *Foundations of Professional Practice*
- cultivating a culture of consensus-building, participatory democracy and empowerment at the school and community levels
- facilitating a critical culture of pedagogical practice in teaching the use of variable types, repetition and selection structures
- facilitating a critical culture of pedagogical practice through the development of local standards of internal documentation
- facilitating a critical culture of pedagogical practice of problem-solving strategies to identify and correct syntax, logic and run-time errors
- fostering a culture of critical reflection through the refinement of external documentation adhering to documentation standards

- facilitating a critical culture of pedagogical practice to develop and implement literacy skills related to computer studies
- fostering a culture of critical reflection related to the development and implementation of mathematical literacy skills related to computer studies.

G. Reflecting, Documenting and Interpreting Learning

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- fostering a culture committed to fair, equitable, transparent, valid and reliable assessment and evaluation methods that honour the dignity, emotional wellness, identities and development of all learners
- promoting a culture of inquiry that critically examines feedback processes that empower and inspire learners to positively reflect on and identify goals for their learning
- facilitating a community of practice committed to engaging learners in the critical analysis and interpretation of the learning process
- fostering a culture of critical inquiry that employs equitable and inclusive processes for reflecting, documenting and interpreting learning
- fostering a culture of inquiry that critically examines assessment, evaluation and reporting practices that align with the principles and processes of Ontario's curriculum, frameworks and policy documents
- facilitating an ethical community of practice that critically integrates assessment practices for the following three purposes: to provide feedback to learners and to adjust instruction (*assessment for learning*); to develop learners' capacity to be independent, autonomous learners (*assessment as learning*); to make informed professional judgments about the quality of learning (*assessment of learning*).

H. Shared Responsibility for Learning

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- fostering an ethical culture that integrates a variety of effective communication and engagement strategies for authentic collaboration with families, caregivers, guardians, school/board personnel and community agencies

- promoting a culture of shared leadership that fosters innovative, ongoing, open and transparent partnerships with families, caregivers and guardians that honour and value shared decision-making, confidentiality, advocacy and leadership
- nurturing a culture of social justice where learners' voice, perspectives and action are integral to the learning process, shared decision-making and leadership
- fostering an ethical culture that informs professional collaboration that support learning, well-being and leadership
- fostering an ethical leadership culture that collectively and openly addresses biases, discrimination and systemic barriers in order to support learning, well-being and inclusion
- fostering a culture of professionalism that collectively transforms structures and systems that will enable diverse voices and perspectives to be freely expressed and critically analyzed
- fostering an ethical culture and dialogue committed to shared responsibility and partnership that promotes social and ecological justice as conveyed in the *Foundations of Professional Practice*
- fostering a culture of collaboration with interdisciplinary teams to support learning, well-being, self-advocacy and transitions.

I. Research, Professional Learning and the Scholarship of Pedagogy

The exploration of the following guiding concepts will be facilitated through equitable, holistic and interrelated inquiry processes:

- fostering a reflective culture that critically investigates past, current and evolving practices in *Computer Studies, Specialist*
- promoting a culture of shared leadership that critically and collaboratively explores professional practice through ongoing inquiry into theory and pedagogy/andragogy
- fostering critical dialogue and inquiry regarding transformational professional learning through research, scholarship and leadership
- cultivating a culture of critical pedagogy that critically utilizes research and the scholarship of pedagogy/andragogy to refine and advance teaching practice
- facilitating a culture of collaborative engagement in which research and the scholarship of critical pedagogy/andragogy are employed to advance communities of practice

- collaboratively fostering a culture of knowledge-creation and mobilization to enhance professional practice and leadership
- fostering a culture that critically explores ethical responsibilities in research and scholarship that honour and embody the *Ethical Standards for the Teaching Profession*
- fostering a culture of ongoing critical inquiry into theories and pedagogies about multiple forms of oppression, power and privilege.

7. Instructional Design and Practices in the Additional Qualification Course: Computer Studies, Specialist

The instructional design and practices (Figure 6) employed in this Additional Qualification course reflect adult learning theories, effective andragogical processes and experiential learning methods that promote critical reflection, dialogue and inquiry.

Candidates collaboratively develop with course instructors the specific learning inquiries, learning experiences, holistic integration processes and forms of assessment and evaluation that will be used throughout the course.

In the implementation of this Additional Qualification course, instructors **facilitate** andragogical processes that are relevant, meaningful and practical to provide candidates with inquiry-based learning experiences related to program design, planning, instruction, pedagogy, integration and assessment and evaluation. The andragogical processes include but are not limited to: experiential learning, role-play, simulations, journal writing, self-directed projects, independent study, small group interaction, dialogue, action research, inquiry, pedagogical documentation, collaborative learning, narrative, case methodologies and critical reflective praxis.

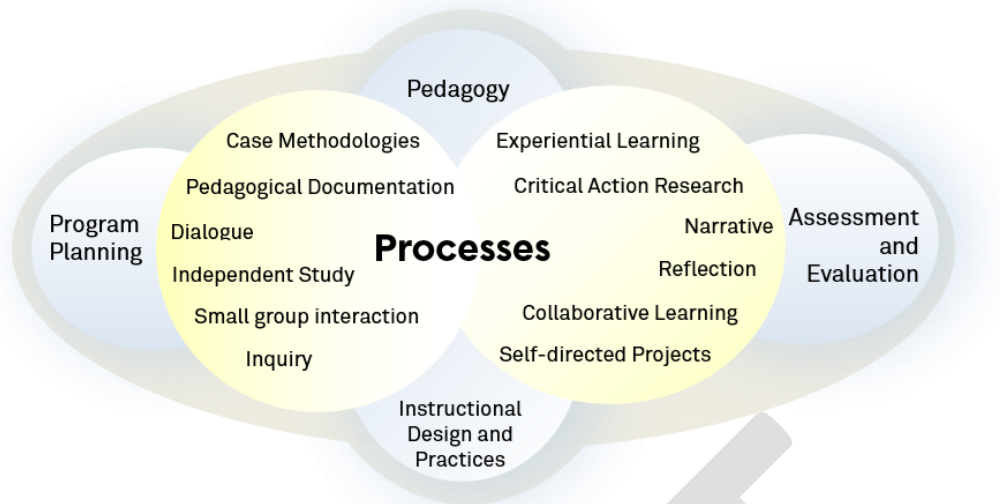


Figure 6: Instructional Processes

Instructors **embody** the *Ethical Standards for the Teaching Profession* and the *Standards of Practice for the Teaching Profession*, honour the principles of adult learning, respect candidates' experience, recognize prior learning, integrate culturally inclusive practices and respond to individual inquiries, interests and needs. Important to the course are opportunities for candidates to create support networks, receive feedback from colleagues and instructors and share their learning with others. Opportunities for professional reading, reflection, dialogue and expression are also integral parts of the course.

Instructors **model** critical inquiry, universal design, differentiated instruction and assessment practices that can be replicated or adapted in a variety of classroom settings.

Experiential Learning

Candidates will be provided with opportunities to engage in experiential learning related to key concepts and aspects of *Computer Studies, Specialist* as collaboratively determined by both the instructor and course candidates. The intent of the experiential learning opportunities is to support the application and integration of practice and theory within the authentic context of teaching and learning. Candidates will also engage in critical reflection and analysis of their engagement in experiential learning opportunities and inquiries related to *Computer Studies, Specialist*.

The professional judgment, knowledge, skills, efficacy and pedagogical practices of candidates will be enhanced and refined through experiential learning and critical inquiry.

The College's standards-based resources help to support experiential learning through various professional inquiry processes. These can be found at: <http://www.oct.ca/resources/categories/professional-standards-and-designation>.

8. Assessment and Evaluation of Candidates

At the beginning of the course, candidates will collaboratively develop with course instructors the specific learning inquiries, experiences and forms of assessment and evaluation that will be used throughout the course. Instructors will provide opportunities for regular and meaningful feedback regarding candidates' progress throughout the course.

A balanced approach to candidate assessment and evaluation is used. It includes the combination of self, peer and mutual (instructor and candidate) assessment, as well as instructor evaluation. The assessment and evaluation strategies reflect effective, collaborative and inquiry-based practices. A variety of assessment approaches will be used that enable candidates to convey their learning related to course inquiries. The course provides opportunities for both formative and summative assessment and evaluation.

Central to candidates enrolled in Additional Qualification courses is the opportunity to be engaged in relevant and meaningful inquiries. Assignments, artefacts and projects enable candidates to make connections between theory and practice. At the same time, assignments also allow candidates flexibility, choice and the opportunity to design individual inquiry opportunities.

Learning processes support an in-depth exploration of concepts and inquiries. These processes occur over the duration of the course and are reflective of critical thinking and reflection as the candidate gains knowledge and skills over the duration of the course

The evaluation practices will also support significant and in-depth critical inquiries utilizing a variety of processes over the duration of the course. These inquiry-based assessment processes provide opportunities for candidates to illustrate a depth of professional knowledge, skills, pedagogies, ethical practices and instructional leadership.

A final culminating experience in the course is recommended. This synthesis experience will reflect the in-depth knowledge and understanding gained as

a result of engagement in this Additional Qualification. It will also include critical reflections and an analysis of a candidate's learning over time.

The following processes are provided to guide assessment practices within this Additional Qualification course and are reflective of experiential learning and critical pedagogies. This list is not exhaustive.

Assessment Processes

- a) **Pedagogical Leadership:** co-constructing, designing and critically assessing culturally inclusive learning opportunities that integrate voice and perspectives, strengths, interests and needs. The learning opportunities will incorporate a variety of technologies and resources and are reflective of Ministry of Education curriculum
- b) **Pedagogical Documentation:** assembling visible records (for example, written notes, photos, videos, audio recordings, artefacts and records of learning) that enable educators, families, caregivers, guardians and learners to discuss, interpret and reflect upon the learning process
- c) **Critical Reflection:** critically analyzing educational issues associated with this Additional Qualification utilizing scholarly research through multiple representations (for example, narratives, written documentation and images or graphics)
- d) **Critical Action Research:** engaging in individual and/or collaborative action research that is informed by the critical exploration of various action research approaches
- e) **Case Inquiry:** critically reflecting on and inquiring into professional practice through case writing and/or case discussion
- f) **Transition Plan:** critically reflecting on and analyzing a transition plan and generating recommendations for enhancement
- g) **Narrative Inquiry:** collaboratively and critically analyzing narratives of teaching and learning through a number of lenses (for example, professional identity, professional efficacy, ethical leadership and critical pedagogies) utilizing the processes of narrative writing and/or narrative discussion
- h) **Pedagogical Portfolio:** creating a professional portfolio that critically analyzes teaching and learning philosophies, assumptions, practices and pedagogies designed to inform ethical and democratic learning environments
- i) **Innovative Learning Experience:** designing and facilitating an engaging, innovative learning experience that reflects differentiated instruction, universal design and the tiered approach

- j) **Partnership Plan:** designing a comprehensive plan that engages learners, families, caregivers, guardians and the school and local communities in collaborative partnerships that support learning, growth and well-being
- k) **I.E.P. Development:** collaboratively developing an I.E.P. with families, caregivers, guardians, learners and the school team
- l) **Visual Narrative:** creating a visual narrative (for example, digital story) that helps to support the collective professional identity of the teaching profession and advances professional knowledge and pedagogy.

DRAFT

Appendix 1

The Ethical Standards for the Teaching Profession

The *Ethical Standards for the Teaching Profession* represent a vision of professional practice. At the heart of a strong and effective teaching profession is a commitment to students and their learning. Members of the Ontario College of Teachers, in their position of trust, demonstrate responsibility in their relationships with students, parents, guardians, colleagues, educational partners, other professionals, the environment and the public.

The Purposes of the Ethical Standards for the Teaching Profession are:

- to inspire members to reflect and uphold the honour and dignity of the teaching profession
- to identify the ethical responsibilities and commitments to the teaching profession
- to guide ethical decisions and actions in the teaching profession
- to promote public trust and confidence in the teaching profession.

The Ethical Standards for the Teaching Profession are:

Care

The ethical standard of *Care* includes compassion, acceptance, interest and insight for developing students' potential. Members express their commitment to students' well-being and learning through positive influence, professional judgment and empathy in practice.

Trust

The ethical standard of *Trust* embodies fairness, openness and honesty. Members' professional relationships with students, colleagues, parents, guardians and the public are based on trust.

Respect

Intrinsic to the ethical standard of *Respect* are trust and fair-mindedness. Members honour human dignity, emotional wellness and cognitive development. In their professional practice, they model respect for spiritual and cultural values, social justice, confidentiality, freedom, democracy and the environment.

Integrity

Honesty, reliability and moral action are embodied in the ethical standard of *Integrity*. Continual reflection assists members in exercising integrity in their professional commitments and responsibilities.

The Standards of Practice for the Teaching Profession

The *Standards of Practice for the Teaching Profession* provide a framework of principles that describes the knowledge, skills and values inherent in Ontario's teaching profession. These standards articulate the goals and aspirations of the profession. These standards convey a collective vision of professionalism that guides the daily practices of members of the Ontario College of Teachers

The Purposes of the Standards of Practice for the Teaching Profession

- to inspire a shared vision for the teaching profession
- to identify the values, knowledge and skills that are distinctive to the teaching profession
- to guide the professional judgment and actions of the teaching profession
- to promote a common language that fosters an understanding of what it means to be a member of the teaching profession.

The Standards of Practice for the Teaching Profession are:

Commitment to Students and Student Learning

Members are dedicated in their care and commitment to students. They treat students equitably and with respect and are sensitive to factors that influence individual student learning. Members facilitate the development of students as contributing citizens of Canadian society.

planning for and responding to the needs of individual students and learning communities. Members refine their professional practice through ongoing inquiry, dialogue and reflection

Professional Knowledge

Members strive to be current in their professional knowledge and recognize its relationship to practice. They understand and reflect on student development, learning theory, pedagogy, curriculum, ethics, educational research and related policies and legislation to inform professional judgment in practice.

Leadership in Learning Communities

Members promote and participate in the creation of collaborative, safe and supportive learning communities. They recognize their shared responsibilities and their leadership roles in order to facilitate student success. Members maintain and uphold the principles of the ethical standards in these learning communities.

Professional Practice

Members apply professional knowledge and experience to promote student learning. They use appropriate pedagogy, assessment and evaluation, resources and technology in

Ongoing Professional Learning

Members recognize that a commitment to ongoing professional learning is integral to effective practice and to student learning. Professional practice and self-directed learning are informed by experience, research, collaboration and knowledge.

Appendix 2

College Standards-Based Resources

Information pertaining to the following standards-based resources, which support learning through professional inquiry, is available through the College web site at www.oct.ca.

- Allard, C.C., Goldblatt, P.F., Kembal, J.I., Kendrick, S.A., Millen, K.J., & Smith, D. (2007). Becoming a reflective community of practice. *Reflective Practice*, 8(3), pp. 299-314.
- Cherubini, L., Kitchen, J., Goldblatt, P., & Smith, D. (2011). Broadening landscapes and affirming professional capacity: A metacognitive approach to teacher induction. *The Professional Educator*, 35(1), pp. 1-15.
- Cherubini, L., Smith, D., Goldblatt, P.F., Engemann, J., & Kitchen, J. (2008). *Learning from experience: Supporting beginning teachers and mentors [Resource kit]*. Toronto, ON: Ontario College of Teachers.
- Ciuffetelli Parker, D., Smith, D., & Goldblatt, P. (2009). Teacher education partnerships: Integration of case studies within an initial teacher education program. *Brock Education*, 18(2), pp. 96-113.
- Goldblatt, P.F., & Smith, D. (2004). Illuminating and facilitating professional knowledge through casework. *European Journal of Teacher Education*, 27(3), pp. 334-354.
- Goldblatt, P.F., & Smith, D. (2005). (Eds.). *Cases for teacher development: Preparing for the classroom*. Thousand Oaks, CA: Sage Publications.
- Killoran, I., Zaretsky, H., Jordan, A., Smith, D., Allard, C., & Moloney, J. (2013). Supporting teachers to work with children with exceptionalities. *Canadian Journal of Education*, 1(36), pp. 240-270.
- Ontario College of Teachers. (2003). *Standards in practice: Fostering professional inquiry*. [Resource kit]. Toronto, ON: Author.
- Ontario College of Teachers. (2006). *The ethical standards for the teaching profession*. [Poster]. Retrieved from <http://www.oct.ca/resources/categories/professional-standards-and-designation>
- Ontario College of Teachers. (2006). *The standards of practice for the teaching profession*. [Poster]. Retrieved from <http://www.oct.ca/resources/categories/professional-standards-and-designation>
- Ontario College of Teachers. (2008). *Living the standards*. [Resource kit]. Toronto, ON: Author.
- Ontario College of Teachers. (2009). *Learning from experience: Supporting beginning teachers and mentors*. [Resource kit]. Toronto, ON: Author.
- Ontario College of Teachers. (2010). *A self-reflective professional learning tool*. Toronto, ON: Author.
- Ontario College of Teachers. (2010). *Voices of wisdom* [DVD]. Toronto, ON: Author.
- Ontario College of Teachers & College of Early Childhood Educators. (2014). *Exploring interprofessional collaboration and ethical leadership*. Toronto, ON: Ontario College of Teachers.
- Ontario College of Teachers. (2014). *Exploring ethical professional relationships*. Toronto, ON: Author.

- Ontario College of Teachers. (2014). *Inquiring into the ethical dimensions of professional practice*. Toronto, ON: Author.
- Ontario College of Teachers. (2014). *Knowledge keepers discussion guide*. Toronto, ON: Author.
- Ontario College of Teachers. (2015). *Acting on our ethics: Caring for Anishinaabe children*. [Video]. Retrieved from <https://www.youtube.com/watch?v=6D4m-7p05Ws>
- Ontario College of Teachers. (2015). *Acting on our ethics: Caring for Haiti*. [Video]. Retrieved from <https://www.youtube.com/watch?v=aWM4ygXisbQ>
- Ontario College of Teachers. (2016). *Foundations of professional practice*. Toronto, ON: Author.
- Ontario College of Teachers. (2016). *Professional learning framework for the teaching profession*. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Acting on our ethics: Caring for Haiti*. [Discussion guide]. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Exploring the ethical standards for the teaching profession through Anishinaabe art*. [Discussion guide]. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Exploring the ethical standards for the teaching profession through Anishinaabe art*. [Posters]. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Exploring the standards of practice for the teaching profession through Anishinaabe art*. [Discussion guide]. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Exploring the standards of practice for the teaching profession through Anishinaabe art*. [Posters]. Toronto, ON: Author.
- Ontario College of Teachers. (2017). *Strengthening a vision: A critical discourse on the ethical standards for the teaching profession*. Toronto, ON: Author.
- Ontario College of Teachers. (2018). *Exploring leadership practices through case inquiry*. Toronto, ON: Author.
- Ontario College of Teachers. (2018). *The image of the educator*. [Poster]. Toronto, ON: Author.
- Ontario College of Teachers. (2018). *The image of the learner*. [Poster]. Toronto, ON: Author.
- Smith, D. (2010). Developing leaders using case inquiry. *Scholar-Practitioner Quarterly*, 4(2), pp. 105-123.
- Smith, D. (2012). Supporting new teacher development using narrative based professional learning. *Reflective Practice*, 13(1), pp. 149-165.
- Smith, D. (2012). Teaching and learning through e-learning: A new additional qualification course for the teaching profession. In, Barbour, M. (Ed). *State of the nation: K-12 online learning in Canada*. Victoria, BC: Open School BC.
- Smith, D. (2013). A dialogic construction of ethical standards for the teaching profession. *Issues in Teacher Education*, pp. 49-62.
- Smith, D. (2013). The power of collective narratives to inform public policy: Re-conceptualizing a Principal's Qualification Program. *International Journal of Leadership in Education*, 16(3), pp. 349-366.

- Smith, D. (2014). Fostering collective ethical capacity with the teaching profession. *Journal of Academic Ethics*, 12(4), pp. 271-286.
- Smith, D. (2015). Exploring inter-professional collaboration and ethical practice: A story of emancipatory professional learning. *Reflective Practice: International and Multidisciplinary Perspectives*, 16(5), pp. 652-676. doi: 10.1080/14623943.2015.1071246.
- Smith, D. (2015). Exploring leadership development with supervisory officers through case inquiry. *Reflective Practice*, 16(4), pp. 559-574.
- Smith, D. (2015). Pedagogies for teacher education policy development in Canada: Democratic dialogue in international teacher education: Promising pedagogies, Part C. *Advances in Research on Teaching*, 22C, pp. 253-279. Emerald Group Publishing Limited. doi: 10.1108/S1479-368720150000022012.
- Smith, D., Allard, C., Flett, J., Debassige, D., Maracle, B., Freeman, K., & Roy, S. (in press.) *Nourishing the teaching spirit: Collaborative development of indigenous teacher education additional qualification course guidelines*.
- Smith, D., & Goldblatt, P.F. (Eds.). (2006). *Casebook guide for teacher education*. Toronto, ON: Ontario College of Teachers.
- Smith, D., & Goldblatt, P.F. (Eds.). (2009). *Exploring leadership and ethical practice through professional inquiry*. Québec City, QC: Les Presses de l'Université Laval.
- Smith, D., Kelly, D., & Allard, C. (2016). Dialogic spaces: A critical policy development perspective of educational leadership qualifications. *International Journal of Leadership in Education*, 20(4), pp. 393-415. doi: 10.1080/13603124.2015.1116608.
- Smith, D., & Qua-Hansen, J. (2015). Democratic dialogue as a process to inform public policy: Re-conceptualizing a supervisory officer's qualification program. *International Journal of Education Policy and Leadership*, 10(1), pp. 1-32.