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Teaching and Learning Philosophy in Ontario High Schools

Lauren Bialystok², Trevor Norris³ and Laura Elizabeth Pinto⁴

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ABSTRACT

Primary objective: This study represents the first large-scale research on high school philosophy in a public education curriculum in North America. Our objective was to identify the impacts of high school philosophy, as well as the challenges of teaching it in its current format in Ontario high schools.

Research design: The qualitative research design captured the perspectives of students and teachers with respect to philosophy at the high school level. All data collection was structured around central questions to provide insight into the dynamics of their shared process of teaching/learning.

Methods and procedures: We conducted semi-structured with interviews philosophy teachers (n = 9), classroom observations (n = 142), and student focus groups at 16 diverse high schools. Transcripts were coded according to themes.

Results: Our findings reflect the complicated nature of philosophy as a discipline characterized by abstract thinking. Participants found it mind-opening, yet challenging, providing educational opportunities that are largely absent in conventional schooling. They saw multiple connections between philosophy and other subjects, but also appreciated its distinctive benefits. Teachers relied primarily on textbooks and contemporary media to deliver the curriculum. We found that a teacher's background in philosophy may influence what is taught in philosophy courses and how, especially given the flexibility of the provincial curriculum.

Conclusions: The findings suggest that philosophy is a unique, beneficial subject that teachers enjoy teaching and students greatly value, characterizing it as both difficult and rewarding. Our study revealed that considerable differences exist in how philosophy is taught and learned around the province. The flexibility of the provincial curriculum appears to be an invitation for creative and responsive teaching; however, philosophy teachers' weak preparation can, by their own admission, be a hindrance to effective curriculum delivery. Studying philosophy enhances students' thinking about other academic areas of study and in some cases opens them up to new ways of thinking.

Key words: philosophy; curriculum; high school; pedagogy; Ontario; teachers

In spite of an ever-expanding menu of courses and subjects offered in certain secondary schools, very few students have the opportunity to study philosophy before they graduate. Some philosophers and educational theorists have long championed the value of including philosophy in the school system instead of reserving it for elective post-secondary study (Ayim, 1976; Fisher, 2003; Goering, Shudak and Wartenberg, 2013). Philosophy is thought to impart an

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³ Brock University

⁴ University of Ontario Institute of Technology

assortment of benefits that both reinforce and transcend the value of other, more conventional subjects (Hand, 2018). In particular, philosophy is associated with critical thinking and logic, as well as contemplating abstract questions about meaning, morality, and knowledge. At a time when political developments and public discourse signal a backlash against the norms of reason, and educational policies increasingly emphasize marketable and technical skills at the expense of the arts and humanities, including philosophy in the pre-college curriculum could be seen as an urgent tonic.

Until recently, aside from at a few rare private schools, philosophy was only available in post-secondary settings in North America. In part due to assumptions about cognitive development that became dominant in educational psychology following Jean Piaget (1926), the abstractness of its subject matter was presumed to elude the cognitive capacities of most children. In the last few decades, however, a small but growing group of philosophers and educators have made a concerted push to expand philosophical learning throughout the precollege curriculum, in both formal and informal settings. The now well established and internationally coordinated Philosophy 4 Children (P4C) movement is a model of successful educational advocacy, with training programs, dedicated learning materials, pedagogical templates, and courses for children in numerous countries (Chetty, Gregory, Haynes, and Murris, 2017). Although the type of philosophy learned in these settings diverges from academic philosophy in obvious ways, it is now accepted that children can learn, and 'do,' philosophy given the opportunity, and that there are considerable benefits to these experiences (Lipman, 1988).

Formal schooling has been slower to respond to the call for pre-college philosophy. While P4C is sometimes integrated into existing school programs (Chetty, Gregory, Haynes, and Murris, 2017; Goering, Shudak, and Wartenberg, 2013), and while courses with philosophical content (especially religion, ethics, and theory of knowledge courses) thrive in some school boards and in particular education programs (e.g., the International Baccalaureate), philosophy as a distinct subject is entirely absent in most schools across the English-speaking world. The dearth of high school philosophy offerings in public education systems has made a systematic study of philosophy at this level hitherto impossible, at least in North America. ⁵

The Canadian province of Ontario is an exceptional jurisdiction in its treatment of philosophy as a curricular subject. Because the Government of Ontario introduced dedicated elective philosophy courses into its public curriculum over 20 years ago, we now have access to rich data about the impacts of exactly the types of pre-college philosophy programs that many other regions are trying to implement. Our research, which specifically studies the implementation of Ontario's philosophy courses, adds credibility to these efforts, as well as advising future directions for the promotion of effective philosophy teaching.

This article is the first high-level analysis of select findings of our study of 19 philosophy classrooms in 16 schools around the Greater Toronto Area. The purpose of the research was to:

- (1) explore how philosophy teachers interpret and experience the teaching of philosophy;
- (2) explore how students are impacted by studying philosophy; and
- (3) examine dynamics within the philosophy classroom as they relate to the first two objectives.

⁵ One study investigated the "practicalities, benefits and challenges of using the P4C method" in seven schools in Wales, three of which were secondary (Council for Education in World Citizenship, 2012, p. 3). While instructive, this experiment is not a perfect analog to Ontario, since the curriculum described here is not based on P4C.

While much has been written about the idea of philosophy in schools, little is based on empirical evidence. Using data collected directly from high school philosophy teachers, students enrolled in high school philosophy courses, and researcher observations of high school philosophy classes in action, this study provides a detailed and multi-faceted account of how philosophy is conceived, practiced, and experienced at the high school level. Listening to students and teachers reflect on these experiences provides an interesting window into the difficult task of conceptualizing philosophy itself, and serves as a microcosm of the whole high school curriculum. These findings can inform future educational policy, curriculum development, teacher education, and philosophy research.

The only precedent for this research in Ontario was an exploratory study of philosophy teachers conducted by Pinto, McDonough, and Boyd in 2007. They conducted an online survey of 53 philosophy teachers and subsequently interviewed 14 respondents, gathering quantifiable information about their educational background, their pedagogical choices, and their impressions of the effectiveness of various teaching methods (Pinto, McDonough, and Boyd, 2009; Pinto, McDonough, and Boyd, 2011). This path-breaking research showed that philosophy teachers have diverse teaching backgrounds, employ a large variety of teaching strategies, and reluctantly rely on textbooks as their dominant source. This earlier study did not include classroom observations or any interactions with philosophy students. The curriculum has also been revised and updated since their data were collected. Furthermore, following approval from the Ontario College of Teachers, philosophy has since been certified as a 'teachable' subject in Ontario and offered in Initial Teacher Education programs as well as Additional Qualifications courses.

In this article we explain the structure of our study, conducted between 2012 and 2014, and report our findings in three main areas: participants' views of philosophy as abstract thinking; the relationship between philosophy and other subjects; and the content and teaching strategies used in the courses. In each section, we draw from our data in order to point to multiple interacting variables and points of view, while drawing out general conclusions and topics for future analysis. The overall finding is that philosophy provides distinct and transferable benefits to students, despite considerable variation in course content, teacher preparation, and school type.

Context

Education in Canada has always been under provincial jurisdiction, as outlined by the British North America Act in 1897 and later in the Constitution Act of 1982 (Pinto, 2012). Thus, only provinces have the authority to mandate K-12 curricula through their ministries of education. Ontario's core curriculum policy consists of outcomes-based policy documents, autonomously issued by the centralized Ministry of Education, which set out requirements for all students in the province, including what courses are offered in high schools. While not all possible courses are offered in every high school, the options are circumscribed by the provincial Government's approved list.

After a significant, 20-year lobbying effort on the part of a group supported by the Canadian Philosophical Association (Jopling, 2000), an elective philosophy course was introduced into the Ontario secondary school system 1995, making Ontario the first and only North American jurisdiction to include philosophy in its official curriculum at the Grade 13/OAC level. Upon the abolition of Grade 13/OAC in 2000, the Ministry of Education's provincial curriculum policy introduced two new elective courses: Philosophy: Questions and Theories in Grade 12, and Philosophy: The Big Questions in Grade 11 (see Appendix 1). These

courses are guided by the Ministry of Education's detailed and prescriptive policy documents, which outline learner outcomes or expectations (Pinto, Boyd & McDonough, 2009; Norris, 2015). The content and structure of the courses were subsequently revised in 2013. The courses are *not* based on the methods and resources developed by the pioneers of P4C, but rather modelled more closely on the study of philosophy at the post-secondary level.

Ministry of Education data reveal that since their introduction in 2000, high school philosophy course enrolments have remained relatively steady, with approximately 3% of all Grade 11 students and approximately 10% of Grade 12 students opting into these courses annually (Ontario School Information System, 2000-2016). As of 2016, there were approximately 150,000 Grade 11 students and 200,000 Grade 12 students enrolled in public schools in the province (Ontario School Information System, 2015-2016); most of the 913 secondary schools in Ontario do *not* offer the philosophy electives, and most that do offer only one of them, usually Grade 12 (this helps to explain the lower enrolment of students in the Grade 11 elective). The public school system is composed of English, English Catholic, French, and French Catholic schools. Private schools may or may not follow the Ontario curriculum. In addition, 76 schools in the province – some public, some private – are designated International Baccalaureate® (IB) schools, and offer a course called Theory of Knowledge (ToK), which is mandatory to earn the IB diploma and overlaps to some extent with the content of the provincial courses. Our sample includes at least one school of each type, and is divided into urban, suburban, and rural designations.

Initially the teachers of the new philosophy electives were appointed or self-selected from other subject areas. Consequently, the degree of preparation and prior experience studying philosophy varied considerably between teachers (Pinto, McDonough, and Boyd, 2009). Philosophy was recognized as a teachable qualification in 2008; however, the certification is not required to teach either course, and the majority of those who teach them are only certified to teach in other subjects. The philosophy background of the teachers in our sample is summarized in Table 4.

The content of the philosophy courses, which are grouped under the Ontario Social Sciences and Humanities Ontario Curriculum (revised 2013), includes conventional areas of philosophical study while remaining deliberately flexible. The Grade 11 course is composed of four pillars: research and inquiry skills; philosophical foundations; philosophical skills; and the relevance of philosophy. It asks broad questions, such as, 'What is a meaningful life?' and 'What separates right from wrong?', makes connections to everyday life, and introduces students to research and inquiry skills. The emphasis is not on particular thinkers, schools of thoughts, or branches of philosophy, although some of these can be found through the 'foundations' pillar. It does not have any prerequisite.

In contrast, the Grade 12 course is divided into units that correspond to branches of philosophy. Teachers must cover at least two of three 'core' subject areas (metaphysics, ethics, and epistemology) and at least one 'supplementary' area (philosophy of science, social and political philosophy, and aesthetics) (Government of Ontario, 2013). It also includes two mandatory units: Research and Inquiry Skills, and Philosophical Foundations, both of which consider the nature of philosophy and philosophical reasoning (somewhat akin to informal logic). The Grade 12 course requires a university/college preparation course in Social Sciences and Humanities, English, or Canadian and World Studies as a prerequisite. Although the curriculum specifies learning expectations and provides numerous examples of thinkers and topics that can be addressed, teachers have considerable discretion over the selection of topics

and texts, as well as the balance of attention given to different portions of the curriculum (see Appendix 1). No standardized textbook is used in Ontario philosophy courses, though several are commonly used: in particular, Ontario teachers rely on Paquette & Gini-Newman (2003), Velasquez (1999), and Sproule (2003). By contrast with the provincially designed courses, the Theory of Knowledge course in the IB program focuses more exclusively on epistemology (http://www.ibo.org/programmes/diploma-programme/curriculum/theory-of-knowledge/what-is-tok/).

Materials and Methods

This study was conceived as a unique opportunity to assemble extensive data about teaching and learning philosophy at the upper-secondary level. The theoretical framework that guides our research methods is critical-democratic. Specifically, our work is grounded in the position that educational research necessitates a conception of the relationship between teachers and students as participants in a shared learning activity (Boyd, 1992; Lipman, 1984, 1991; Portelli & Vibert, 2002) and that this may be especially true for philosophy. Thus, our approach to research sought to include not only the voices and perspectives of teachers, but of students as well. To capture the voices and perspectives of students with respect to their experiences in studying philosophy at the high school level, we studied whole classrooms and all the participants within them to better understand the dynamics and context of their shared process of learning philosophy.

We designed three research instruments to elicit data for the over-arching research questions and to enable triangulation among sources. First, we conducted in-depth semi-structured interviews with philosophy teachers; second, we conducted focus groups with students from the same class; and third, we conducted classroom observations, with two researchers simultaneously observing each class. While the students were asked different questions in their focus groups from those asked of the teachers in interviews, all participants commented on the same themes, and classroom observations allowed researchers to check their descriptions against actual classroom activity. The protocols were developed by the research team through an iterative process, reviewed by colleagues, and piloted within a team session. Research team members were trained in their use prior to going out to the field. All instruments were approved by the research ethics boards of the researchers' institutions, and by participating school districts.

We visited 16 schools around southern Ontario over a two-year period, between April 2012 and June 2014. We interviewed 19 teachers, held focus groups with a total of 216 students, and conducted 142 classroom observations, each of approximately 60-75 minutes. For the interviews, two members of the research team met with each teacher at their workplace to conduct an interview of approximately one hour in length. Researchers took field notes during interviews, and all interviews were audio-recorded with explicit consent. Once completed, all interviews were transcribed and shared with the research team. Student focus groups were conducted at the school site and facilitated by two members of the research team during a lunch or spare period. Students were asked 10 questions, with sub-questions, and invited to add details on topics arising. The focus groups were 40-60 minutes in duration and they were audio-recorded and transcribed with participants' consent.

Classroom observations were unobtrusive, with one to two members of the research team conducting multiple observations in each class taught by one of the teachers interviewed. Researchers followed a field note recording guide that described the structure of the class in time blocks, and summarized teacher activity student activity for the duration of classes observed (Creswell, 1998). Classes were not recorded, but detailed observational notes were taken.

Participants were recruited through purposive sampling (Palys, 2008) via the researchers' professional teaching contacts, as well as through snowball sampling (Onwuegbuzie and Leech, 2007), where suitable teacher participants recommended colleagues. The researchers aimed to select school sites that offered a balance of: school type (public schools, publicly funded Catholic schools, and private schools); course representation (Grade 11, Grade 12, ToK); mainstream or alternative⁶; geographic/community diversity (rural, urban, and suburban, in communities with various demographics); and official language of instruction (English, French). Of the two private schools, one was all girls and the other all boys. This allowed for a very wide diversity of schools, teachers, and students in our study, and included all the major types of schooling in Ontario. Table 1 summarizes the data collected and Table 2 breaks down the variables by percentage of the sample.

Once potential school sites were identified and school districts consented to participation through research ethics processes, teachers were confirmed for participation in a manner that ensured gender and course diversity. After identifying participating teachers and classes, students received an informational letter of invitation to participate in focus groups outside of class time and a letter of informed consent (for students under 18, parents provided consent on their behalf). Students who self-selected to participate and who were able to provide appropriate consent were included in focus groups. In one case, students from two different classes with the same teacher were pooled into one focus group. Students from the same school who had different philosophy teachers participated in separate focus groups. We were unable to assemble a focus group at only one school in the sample.

Table 1: Summary of Data Collected

Schools (16)	School	School Location	Courses Taught	Teachers (19)	Number of Classroom Observations (142)	Number of Students in Focus Group (216)
Crito	Catholic	Suburban	Grade 12	Mr. Thucydides	7	9
Phaedo	Public	Suburban	ToK	Mr. Plato	8	6
			Grade 12	Mr. Aristotle	8	10
Charmides	Public	Urban	Grade 12	Ms. Nietzsche	8	5
Laches	Private (all girls)	Urban	ToK	Ms. Cicero	8	
Gorgias	French Public	Urban	Grade 12	Mr. Machiavelli	8	6
Lysis	Public	Urban	Grade 11	Ms. Hobbes	8	8
			Grade 12	Ms. Locke	8	17
Meno	Public	Urban	Grade 12	Mr. Rousseau	16	3
Phaedrus	Public	Urban	Grade 11	Mr. Marx	16	5
Symposium	French Catholic	Rural	Grade 12	Mr. Xenophon	8	10
Republic	Catholic	Suburban	Grade 12	Mr. Mill	8	6
Parmenides	Catholic	Urban	Grade 12	Mr. Kant	8	9
Timaeus	Catholic	Suburban	Grade 12	Ms. Hegel	8	8

⁶Alternative schools are publicly funded schools that allow for greater flexibility for students. For example, many alternative schools don't have set 'periods' and allow for greater range in assessment, such as self-directed projects. Sometimes they are intended to provide greater accommodations for students with unique educational, medical or behavioral needs.

Statesman	Catholic	Suburban	Grade 11	Mr. Heidegger	8	4
			Grade 12	Mr. Heidegger	7	3
Sophist	Public (alternative)	Urban	Grade 11	Ms. Arendt	8	4
Critias	Private (all	Urban	Grade 11	Mr. Foucault	7	5
boys)		Grade 12	Mr. Foucault	8		
			ToK	Mr. Derrida	6	6
Laws	Public	Suburban	Grade 11	Mr. Zizek	8	2

Table 2: Breakdown of Schools and Teachers

Type of School (n=16)	Number	Percentage of	
		Sample	
English Public	7	44%	
Catholic (Public)	5	31%	
French (Public)	2	13%	
Private	2	13%	
School Location (n=16)			
Urban	9	56%	
Suburban	6	38%	
Rural	1	6%	
Gender of Teachers (n=19)			
Male	13	68%	
Female	6	31%	

The data were anonymized before coding began; teachers were assigned pseudonyms of famous philosophers and schools were named after Platonic dialogues. The gender of the teachers was preserved post-anonymization (see Table 1) but not that of students, as gender was not a variable we were able to meaningfully analyze. Students were not assigned individual codes because the focus group format and classroom observations made it impractical to track individual contributions. Instead, students are identified only by their school alias. Hence, each Platonic dialogue (school alias) is a shared designator for all the students in a given focus group, ranging from two to 17. The number of students who participated in each focus group can be found in Table 1.

Transcripts of teacher interviews and focus groups were entered into NVIVO software and each document was coded by multiple members of the research team. Before anyone coded independently, we met as a team and worked through several transcripts together. We relied on inductive analysis as described by Bogdan and Biklen (1998), which includes process coding, where codes reflected both common and various emergent themes. By approaching the data inductively, the researchers identified patterns, themes, and categories that "emerge out of the data rather than being imposed on them prior to data collection and analysis" (Patton, 1990, p. 390).

During coding, new themes were compared and discussed among the researchers, and revised to reflect consensus. This form of data analysis is what Tesch (1990) characterizes as "de-contextualization," in order to identify themes and coding categories, and "recontextualization," to present a unified and coherent picture. The variety of data collected (interviews, focus groups, observations) offered the advantage of triangulation to verify the strength and/or accuracy of data gathered (Heck, 2004). Where data were contradictory, the researchers noted differences. Where data were consistent, the researchers noted the strength of claims. This comparison of differences and similarities across interviews and archival documents

allowed for the possibility to draw stronger conclusions about various courses of action and themes.

Some of the themes for analysis matched the types of questions that we asked teachers and students. For instance, teachers were asked to comment on their aims in teaching philosophy; their pedagogical strategies; the use of resources and textbooks; and how they manage controversial issues. Students were asked to comment on their conceptualization of philosophy; their preferred learning methods; texts used; cross-curricular connections between philosophy and their other courses; the impact of philosophy on religious views; and other personal impacts. Through coding, additional themes emerged, such as: teacher autonomy; the risks of taking philosophy; parents' views; and the place of philosophy in Catholic schools.

The findings presented below are derived from analysis of the main themes converging between the teacher interviews and student focus groups. Our purpose is to highlight dominant ideas about philosophy among these two groups and, where appropriate, signal points of disagreement or difference in perspective.

Table 3: Teachers' Years of Philosophy Teaching Experience

Number of Years	Number of Teachers (n=19)	Percentage of Sample
1-3	4	21%
4-5	6	32%
6-7	3	15%
8-9	4	21%
10 or more	2	11%

Table 4: Teachers' Educational Backgrounds and Years of Experience

Teacher	Self-Described Background in Philosophy or Related Areas	Number of Years Teaching Philosophy
Arendt	Some undergraduate courses	7
Aristotle	Some undergraduate courses	7
Cicero	'humanities background'	4
Derrida	Some undergraduate courses	4-5
Foucault	Undergraduate major in philosophy and a Masters in a combined philosophy-cultural studies program.	4-5
Hegel	MA in religious education	3
Heidegger	Undergraduate major	8
Hobbes	Self-taught	4
Kant	Undergraduate double-major in philosophy and economics	10
Locke	Some undergraduate political theory courses	8
Machiavelli	Self-taught	1
Marx	Informal	6-7
Mill	'I've studied the church's teachings and I have a little bit of a background in philosophy'	12
Plato	Doctorate in philosophical discipline	8
Rousseau	Undergraduate minor	5
Thucydides	Undergraduate specialist ⁷	8
Zizek	Some undergraduate courses	3

⁷ A 'specialist' refers to a major with extra courses in the discipline.

Results and Discussion

Philosophy as abstract thought

This study allowed us to learn more about students' and teachers' perceptions of philosophical thinking and, relatedly, its benefits and impacts. As expected, both teachers and students stressed philosophy's unique concern with abstract reasoning, citing it as the main feature of this subject. This arose during teacher interviews when they were asked to identify their aims, and in focus groups when students were asked to define philosophy, but also throughout our conversations with the participants. Both groups of participants appreciated being able to study a subject without pre-defined answers. However, the meaning and implications of this feature of philosophy were characterized inconsistently by our subjects, prompting further questions about the nature of philosophy instruction and its benefits. *Critical or creative thinking?*

When asked to reflect on the aims of teaching philosophy, teachers overwhelmingly referred to 'critical thinking' (see Table 5, below). The educational and philosophical literature reflects a multiplicity of (sometimes contested) understandings of critical thinking, despite its fairly uncontroversial though sometimes rhetorical adoption as an educational goal (Bailin, Case, Coombs & Daniels, 1999; Dalgleish, Girard, & Davies, 2017; Ennis, 1995; Facione, 1990; Haroutunian-Gordon, 1998; Siegel, 1988; McPeck, Norris, Paul, & Siegel, 1990). There is general agreement that critical thinking entails both a set of activities and a dispositional aspect often referred to as the "critical spirit" (Bailin et al., 1999; Siegel, 1988). Perfunctory, jobfocused conceptions of critical thinking serve the immediate interests of employers by promoting "problem-solving" and "creative thinking" aimed at career preparation (Pinto & Portelli, 2009). As Sirotnik (1998) observes: 'Rarely does the curriculum treat critical thinking as a dialectical process of reflective thought and communication, of competent discourse between people having both common and conflicting values, needs and human interests' (p. 65). Additionally, contemporary conceptions of critical thinking emphasize critical pedagogy and feminist epistemologies, with attention to inclusivity and the role of critical thinking in contributing to equity and social justice (e.g., Dalgleish, Girard, & Davies, 2017; Gieves, 1998; Pinto & Portelli, 2009).

The teachers in our sample discussed critical thinking in mostly vague terms. Some stressed the dispositional aspect of critical thinking, which they tended to describe as a general posture of open-mindedness that promotes a diversity of views. Mr. Machiavelli wanted his students to be 'self-learners' who should be 'not...so kind of bogged down with what they were taught to believe to see that there's possibility for other points of view.' He specifically aimed to help his students 'use critical thinking to arrive [at] valid answers.'

Ms. Cicero said that 'some of the aims of the course are to get students to look at claims that they have never questioned before, and to think about who would make that claim and why and how well it's supported.' Mr. Marx talked about encouraging students 'to see how arguments develop.'

One teacher implied a contrast between 'critical thinking' and 'creative thinking': I think most importantly to have students understand that creative thinking is a huge-I know critical thinking is the big, you know, pedagogical, gurus thing but I think creative thinking is as important in thinking about philosophical contemplations and interpretations so I guess developing good critical, good solid thinking skills, whether

that lens is through critical or through creative or different disciplines being filtered in. (Ms. Arendt)

Though Ms. Arendt's comments here leave the conceptual boundaries ambiguous, *creative* thinking might be an apt description of some of the aims that teachers and students described, as it is more associated with wonder and inquiry than critical thinking. However, she used a skills discourse in referring to 'critical thinking tools,' precisely the narrow (mis)conception of critical thinking that Bailin et al. (1998) challenge.

Many teachers stressed the importance of developing students' own unique views independent of what views are held by others or from dominant views. For Mr. Aristotle, one aim was to equip students to practice 'broad critical thinking where [students are] able to apply criteria in an open-minded way to a number of issues.' Ms. Hobbes said, 'my biggest aim is to get students to ask questions about things that they don't usually ask questions about or that they didn't even imagine that they were supposed to ask questions about.' And Mr. Zizek thought that philosophy was 'generally just the idea of pursuing wisdom, which to me just means that you realize there is more out there than what you first thought... Generally speaking, to think creatively about problems.' Like others, Mr. Zizek also tended to apply a narrow conception of critical thinking, and like Ms. Arendt, appears to conflate it with creative thinking.

Overall, the philosophy teachers interviewed tended to convey relatively narrow conceptions of critical thinking in their responses. No evidence existed of them considering or using feminist epistemology or critical pedagogy with respect to their application of critical thinking in their classrooms. Nonetheless, the importance of questioning one's views and exploring alternatives featured prominently in their conceptions of philosophy.

Questioning

The students we spoke to occasionally referenced critical thinking as such, but more widely echoed their teachers' perceptions of philosophy as an exercise in questioning. They expressed appreciation for having a school subject without rigid answers or pre-determined endpoints. When asked to define philosophy, they stressed its open-endedness:

'It's like, a never-ending sea of questions, like, where like answers aren't really important.' (Timaeus student)

'Philosophy is...like, repeatedly asking 'Why?' to even things that you accept as everyday and true.' (Meno student)

'All I can say is... you never arrive at a finish. You just start...' (Phaedo student)

'It opens your mind.' (Lysis student)

These descriptions also confirmed students' perception of philosophy as unique from other things they learn in school:

'I think we're, at first we weren't used to having philosophy classes. We were like, this is different than like math or science classes. There's no lesson ...' (Phaedo student)

'This is the one class I feel like that I have where you're actually... encouraged to question, so it's not rude if you question the teacher about something, it's not that you're- you don't believe that they're qualified or something, it's- you're honestly trying to understand. So I think that's great.' (Statesman student)

'I don't feel like I'm like in a class when I'm here. It's like- it's like philosophy, you know?' (Timaeus student)

Students were sometimes led to broader and more critical statements about schooling in general, and how philosophy itself might be inconsistent with the rest of their experience with schooling:

'I feel like the educational system just brainwashes us to think one way when it should be more ... like, based on philosophy, and like opened for space for us to question' (Gorgias student)

'I'm not actually sure why this happens...'cause in all honesty, in high school when we tend to do group work, people tend to slack off a lot, that's just how it works. But in philosophy class, um, when that happens, for some reason everyone ...tend[s] to actually be on... on topic and work to get things done.' (Phaedrus student)

"...school does not teach you the things you need to know about life. School lets you get to the next year, and to the next year and to the next year, to what you know, but overall school teaches you how to learn, for the most part. Philosophy on the other hand, it teaches you how to think." (Statesman student)

Generally, both teachers and students relished the opportunity to engage in a subject that admits of non-instrumental thinking. Many students appreciated that they could express themselves better in philosophy because their opinion mattered in a way that was often irrelevant in other disciplines:

'Philosophy to me is, um, ways to question things without being necessarily judged for it.' (Symposium student)

'I... wanted to take this class because the teachers can't tell me that I'm wrong.' (Gorgias student)

Relativism

While both teachers and students talked about the open-ended nature of philosophical questions, one main difference between the two participant groups concerned their stance toward assessing information. Whereas most teachers talked about wanting students to assess arguments using reasoning, coming to recognize some as more or less valid, students tended to conclude that asking questions was more important than assessing answers, and some went so far as to suggest that all answers or opinions were equally legitimate. This led to a concern with what many of the teachers labelled 'relativism':

'In my first year a couple of students picked up on the relativism idea and just went with it. And there was nothing else I could do!' (Ms. Hobbes)

Rather than dogmatism, 'relativism is more the thing I fight against.' (Mr. Marx) In focus groups we also observed that some students appeared to have given up on the possibility of distinguishing strong and weak arguments, or reason and feeling:

'I think that, like, logic is only based on how you reason. So if my logical point of view is to kill you, that's logic to me.' (Gorgias student)

'No one's going to be right and no one's going to be wrong because there is no proof.' (Lysis student)

'I can explain myself and you can't say that I'm wrong 'cause this is how I feel.'(Gorgias student)

If the open-endedness of philosophy translates into passive relativism, there is cause to worry that students are not sharpening their thinking as much as they could be through the study of philosophy. As one teacher put it, we don't want students to simply conclude, 'well, we are all different, we can all go home' (Mr. Derrida). In our study, philosophy's abstraction made it both an appealing break from most subjects, which are highly prescribed, and at times uncomfortably challenging. The relationships between critical and creative thinking, abstraction and relativism, and logic and the curriculum all merit closer scrutiny.

Table 5: Teachers' Perceptions of the Aims of Teaching Philosophy

1 able 5. Teachers Terceptions of the family of Teachers	
Aim	Frequency
Critical thinking/logic/ reasoning/argumentation	15
Canonical knowledge	5
Ability to apply philosophy to other/all aspects of life and subjects	3
Ability to write (e.g., essays)	2
Self-knowledge	2
Social justice or 'social justice/international perspective'	2
Creative thinking	2
Autonomy and self-direction	2
Extrinsic ends (earn this credit, or succeed at university)	1
Love of philosophy	1
Wisdom	1
Catholic traditions of faith and reason	1
	1

Connections with other subjects

If philosophy is characterized primarily by abstract thinking, then it has implications for all academic engagements. It is this very attribute of independent, inquisitive thought that both distinguishes philosophy as a discipline and enables students to think beyond the content presented in philosophy classes. Students demonstrated this when they spontaneously began making connections to other subjects, sometimes even bringing philosophical questions into those classes—asking philosophical questions about foundational principles and assumptions in other subjects— and other times bringing their knowledge and expertise in other subjects into the philosophy classroom.

Our participants' comments on philosophy's relationship to other high school subjects thus generated insights into metaphilosophy and questions about curriculum design. While different views emerged about the connections between philosophy and other subjects, the data strongly suggest that students benefit from studying philosophy alongside the rest of the curriculum, and that the boundaries between courses and subject areas are more porous than the high school rotary system suggests.

Teachers mostly framed the question of overlap in terms of the challenges of teaching abstract thinking, as revealed in the previous section. Ms. Locke said that philosophy 'has more, so much more open-ended material that other courses don't...it's not math, it's not science.' Mr. Zizek agreed that philosophy's content distinguishes it from other courses: 'The goal of philosophy is different in the sense that like, there is no defined output, like it's more about the ability to ask questions than it is to have answers; that's, I think, a fundamental difference.' In pinpointing the unique features of philosophy, however, they were not denying its relevance to other subjects. In fact, Ms. Hobbes said that at the end of the course she wanted students to '[be] able to understand how every subject is basically philosophy.'

Philosophy's similarities to the humanities and sciences

The students readily identified philosophy's affinity with other humanities subjects because of the focus on essay-writing and the centrality of written texts; they commented that the skills and assessment format resemble those in English and History, and, where applicable, social science. Moreover, several students commented that philosophy helps them to excel at or go deeper into these cognate subjects:

'English, like when we're talking about language a lot... it made me question how I use my words, well, how I read...so that helped with English.' (Phaedo student)

'I have, uh, World Issues [a Grade 12 geography course], so it's basically like applying philosophy but to the real world... the government is doing this, what's their justification behind that, and, like, philosophy really applies to everyone's way of thinking....' (Timaeus student)

'I feel like philosophy has really helped with my English writing.' (Crito student) Some students also delivered astute assessments of the relationship between philosophy and math and science. They recognized that in pursuing these subjects, they were also already engaged in philosophical work. Notably, a disproportionate number of these insights came from students whose teacher had a Master's or Doctorate degree in philosophy of education, and from students enrolled in ToK:

'I think, in order to engage in any type of science, you're necessarily engaging in epistemology, 'cause you're discussing knowledge type A, and why it's valid.' (Phaedo student)

'I think science kind of...all science sort of started out as philosophy, so I think that ... they're related.' (Crito student)

Interestingly, philosophy was also seen by these same students to cast doubt on the universality or objectivity of science:

'In Mr. Aristotle's class we ended up criticizing the science curriculum in schools.' (Phaedo)

Philosophy 'gives me... an excuse to not believe some [scientists]... it's really led me to be a little more critical of my sources of information.' (Phaedo student)

As the purpose of the philosophy courses was never to challenge the legitimacy or foundation of other subjects, this finding is noteworthy. It may relate to other comments that surfaced in our conversations suggesting that studying philosophy engendered certain disagreements or a change in dynamic between the students and adults in their lives. In future work it would be useful to ask whether teachers of other subjects experience changes in their students who are simultaneously studying philosophy.

Their newfound skepticism notwithstanding, students in our study indicated that philosophy heightened their interest in other subjects. While some students stressed philosophy's kinship with the humanities and social sciences, and others emphasized its relevance for math and science, the dominant sentiment among students was that philosophy permeated everything else they were learning:

'It gets into like, every class. Like, every class you do, it's just like, there's some form of philosophy or school of philosophy that you have to incorporate and it relates to everything.' (Lysis student)

'I don't think there's any course that can properly be said to be... without any backing in philosophy.' (Critias student)

⁸ The Ontario Curriculum includes discrete elective high school courses in economics, law, equity studies, religious studies, and politics, and an introduction to sociology, anthropology and psychology. In curricular documents they are grouped into 'Social Sciences and Humanities' (which includes philosophy) and 'Canadian and World Issues' (which includes history and geography). Only some of the possible courses are offered at each school.

'The philosophy course made me more curious in my other classes because it showed me what I don't know in those classes.' (Phaedo student)

At least one student disagreed that philosophy related directly to other subjects, but in so doing confirmed its relevance far beyond school subjects:

I don't really think...it has any direct correlation to other academic subjects like science or history or... uh, English. I mean, it definitely helps you structure arguments, which is very important in English, but... I felt that it was- had nothing to do with academia for me, it was about life. (Sophist student)

Cross-curricular benefits

These students' comments on the relationships between philosophy and other subjects are significant in several ways. Research suggests that students who study philosophy improve their performance in standard numeracy- and literacy-based subjects and the standardized tests associated with them (Australasian Association of Philosophy Working Party, 2009; Burgh, 2003). College students who major in philosophy earn high scores on standardized tests such as the GRE and LSAT (UC Davis, n.d.). Yet very little is known about students' own conceptualizations of these subjects and the connections between them.

In our study, students' reflections on the connections between philosophy and the rest of the high school curriculum – as well as the distinguishing features of philosophy as a mode of inquiry – correspond to intuitions about the cross-curricular benefits of this type of program. If philosophy promotes curiosity, exposes intellectual foundations, and strengthens writing and reasoning skills, as these students indicate, then it is logical to assume that dedicated philosophy courses would be a boon to academic outcomes around the school.

The findings from these interviews and focus groups also contribute to a growing literature about, and advocacy for, 'philosophy across the curriculum.' (Bialystok, 2017; Davis, 2013; Lukey, 2012; Topping & Trickey, 2007) The models for this type of education vary, but the thought is that non-philosophy teachers can bring out the philosophical elements in each of their subjects (philosophy of science, philosophy of literature, philosophy of history, etc.) to enhance students' understanding and appreciation of the material. Though neither the philosophy teachers in our sample nor the teachers of these students' other classes were charged with teaching 'philosophy across the curriculum' as such, 'it appears as though these young people spontaneously came to appreciate the many 'philosophies-of' in their designated philosophy courses.

It is noteworthy that teachers, in their responses about outcomes they perceive for students when taking the course, rarely discussed cross-curricular benefits, instead tending to emphasize benefits to students in their personal and intellectual development (e.g., self-awareness, curiosity). Mr. Plato was one exception; he described the students' coming to 'the awareness that, "wow, there's a philosophical perspective on geography or on history or on economics? There's economic philosophy?"'

Course design

As noted earlier, the two Ontario philosophy courses – and, to a lesser extent, the IB Theory of Knowledge course – are considerably more flexible than most courses in the Ontario Curriculum. In Grade 12, teachers can choose from among several possible units, and teachers

⁹ Since high school philosophy teachers invariably teach other courses as well, they can choose to pursue cross-curricular philosophy. When asked, 'Do you infuse some philosophy in your history classes?' Mr. Xenophon answered: 'Oh absolutely. Absolutely.' However there is no curricular or structural mandate to do so.

of both courses have extensive latitude when deciding which topics, materials, and assignments to use (Appendix 1). This allows for considerable teacher autonomy, and thus significant variation between classes and schools. Furthermore, the teachers of philosophy in Ontario high schools are not required to have any particular preparation to teach this subject, despite the availability of a philosophy qualification. In other words, it is possible to teach these philosophy courses without any background in philosophy, and without any training in how to teach philosophy. Finally, there is rarely more than one philosophy teacher in each school (though three of the schools in our sample were exceptions to this), meaning that philosophy teachers often construct their courses in relative isolation and with little oversight. These variables all lead to important questions about how philosophy is taught around the province. *Course Content and Teacher Preparation*

Students were quite unanimous about the kinds of topics and teaching strategies they liked best and the teachers were well attuned to these preferences. Of all the branches of philosophy that form the mandatory and optional units in the curriculum, ethics emerged as the most popular, and logic, the least. Ethics seemed to delight students because it was familiar and accessible yet controversial and urgent, provoking strong and passionate responses to unresolved disagreements. Teachers and students described engaging activities based on prompts from ethical dilemmas in contemporary culture. But hypothetical scenarios, such as the Trolley Problem, provoked just as much disagreement.

Teachers agreed with students that logic – especially as a designated unit, studied formally – was dry and difficult. Mr. Rousseau said, 'doing symbolic logic, I found, I tried doing it the first year and people were - they literally blanched.' But significantly, teachers often accounted for the undesirability of logic (or other topics) with reference to their own academic limitations. Mr. Plato, the teacher with the most formal philosophy education in our sample, noted:

I'd say [formal logic is] hard and also intimidating for teachers. Even for myself I had to really step up and get on top of that so I felt comfortable and could handle questions. So I've seen a lot of other teachers that don't have a philosophy or back- or a strong background and they skip it. (Mr. Plato)

Indeed, teachers' own backgrounds in philosophy and other subjects clearly influenced the material they chose to bring into their classes, as well as their levels of confidence:

'I've read a lot more 19th century and 20th century social political stuff than some of my colleagues, so that stuff gets more emphasis in my class. I'm kind of interested in questions about artificial humans, artificial intelligence. So that's part of the bench in metaphysics.' (Mr. Rousseau)

'You emphasize some things you're comfortable with, and not de-emphasize, but you maybe you don't focus on things that you are not comfortable [with].' (Ms. Hegel)

'My own personal, academic strengths influence some of the things that we learn, but ...there's a stated curriculum out there.' (Mr. Thucydides)

These comments are noteworthy because there are few if any other high school subject areas in which teachers' personal interests, strengths, and academic backgrounds exert such a conspicuous influence over the content and format of the course. These teachers can meet curricular requirements while still diverging considerably from one another in course design. *Pedagogical Practices*

While ethics, social and political philosophy were the most popular fields of philosophy, it was the provocative and accessible character of philosophy that seemed to make a topic or

classroom activity most engaging. This often included classes in metaphysics, epistemology and other areas. As one student said, 'I think pretty much any area of philosophy that allows room for a lot of discussion and sharing of opinions is more engaging than others.' (Phaedo student).

Religious metaphysics were charged topics in many classrooms, as one student explained: 'Well the um, the "Does God exist?" question really revved up some people in the class.' (Charmides student)

Other students described particularly engaging discussions:

I really like the giant class discussions, where everyone's arguing with each other. My favourite activity was actually, we had two sides, about this one thing we were learning in metaphysics, is he alive or not alive? Basically you have to convince everyone else in the class to be on your side and we just went at it. That was so much fun. (Meno student)

At an all-boys school, a class discussion 'about whether women are equal to men went on for 5-10 classes' and 'bled into the school newspaper' (Critias student). We also observed that meta-conversations about philosophy in focus groups frequently devolved into first-order philosophical debates. In the Lysis focus group, students temporarily abandoned the interview questions and had a heated debate about the existence of God and the nature of belief.

The pedagogical value of such discussions was not lost on students either. Beyond using debate as a tool to work out philosophical positions, several students commented that it had independent educational value, demonstrating commitment to epistemological integrity over victory in argument:

One of my favourite things is losing a good argument. I think that's a really important thing, and not only in philosophy, but, you know, with science or with law, whatever have you, I think it's really nice to be proven wrong and to be gracefully accepting that you're wrong. I think that's important. (Sophist student)

The teachers we interviewed consistently reflected the importance of student-centered strategies when teaching philosophy, particularly referencing the role of class discussion and debates. One teacher described his strategy for steering students through group discussion to more independently reflective opinions:

I always try...to design the course to start big and end small. So they start in a large group setting facilitating each other's knowledge in learning, they learn from each other they see that there are lots of ideas that are out there, that are generated by students not by me. And that creates an environment where later on I get more and more and more towards the individual and what they think absent of anyone else, so by the end of the course hopefully they feel comfortable to propose ideas that, and concepts and questions that matter to them personally, based on how they have come to understand the nature of the material. (Mr. Zizek)

In addition to facilitated discussions, student-centered pedagogies included kinesthetic activities (e.g. Four Corners), thought experiments (e.g. designing a social contract), and 'philosophy cafés' ('I actually make coffee for them,' Mr. Machiavelli said). Like the teachers surveyed by Pinto, McDonough and Boyd (2009: p. 79), the teachers we interviewed employed a variety of classroom teaching techniques, and the students agreed that almost anything but sustained teacher-centered lecture could be highly engaging.

None of the teachers explicitly mentioned the technique or classroom set-up known as "Community of Inquiry (COI)," which is a central pillar of P4C. The Ontario courses are not based on P4C – the revised 2013 curriculum makes no mention of COI – and the teachers are not required to have any familiarity with either the pioneering work of P4C founder Matthew

Lipman or with current programs such as the UK-based SAPERE. That said, all three data gathering strategies indicated that most teachers use aspects of the COI approach, and the curriculum documents include many 'teacher prompts' that encourage dialogical approaches to teaching philosophy.

Course texts

The provincial Ministry of Education requires that all books and textbooks used in Ontario classrooms be preapproved and appear on their 'Trillium List' (http://www.trilliumlist.ca/), though teachers can choose from among the approved books. This is the case for philosophy, where teachers can select from among several textbooks, as well as primary sources and other materials. While both teachers and students agreed that the available textbooks had significant limitations, most teachers regarded some textbook use as necessary. Our findings mirror those of the previous study in Ontario, which found that teachers rely on textbooks despite expressing reservations about their effectiveness (Pinto, McDonough and Boyd, 2009; Pinto, McDonough and Boyd 2011). One teacher said, 'Having the kids read the textbook is the least effective way [to teach philosophy]. I don't think they really- a lot soaks in. I do it. And...I don't think it's totally invalid, but I think...of all the scale of the things I do, I think it's the least effective.' (Mr. Kant) One student sagely commented: 'The way I see it is that the textbook literally has the best amount of information, but realistically...not everyone fully takes in what it should be telling you.' (Statesman student)

Pinto, McDonough and Boyd (2009) found that teachers' background knowledge of philosophy was correlated to their comfort level teaching high school philosophy, but that 'regardless of ...level of formalized philosophical education, respondents tend to have a homogeneous approach to use of materials ...in their high school philosophy classes' (p. 74). In our study, we did not explicitly look for a correlation between these factors, but several teachers commented on the usefulness of textbooks to teachers with less philosophical background:

'I think to a certain degree [reading the textbook is] how it's probably taught in Ontario because there [are] so many teachers [who] don't have a background in philosophy who are teaching it and they might overly rely on a textbook.' (Mr. Thucydides)

'When I came into teaching [philosophy] not being all that expert in the area, [the textbook] helped. It helps teachers. Do students find it boring? Possibly. But at least it gives us a base.' (Ms. Locke)

'So the first time I taught it, it was like, here's the textbook, let's...follow the textbook and go from there.' (Ms. Hegel)

Notwithstanding the short excerpts from primary sources that are included in some of the available philosophy textbooks, primary sources were used very sparsely by the teachers we interviewed. Teachers' choices about using primary sources may also be correlated to their philosophy background. One teacher noted:

'Primary source texts would be something that I'd like to start bringing into the class a bit more, and part of that is ... well, actually I think most of that is really a result of me not actually being... actually qualified to teach philosophy, like I never actually even took a philosophy course in university.' (Mr. Machiavelli)

Another teacher explained the risks of using a primary source without knowing it well enough: We read Descartes' *Meditations*, and ... I've read it several times, but at that point I wasn't really clear about the material and ... the lesson didn't go very well because I wasn't as well versed in the material as I've should have been. ... I think if you don't

have knowledge of your material...then it can come up from under you in a philosophy class more so than a history class. (Ms. Arendt)

A few teachers in the sample, however, did stress the importance of primary texts. As one explained: '[d]oing close readings of the books and having the students read along with you is, you know, the only way to do- to learn philosophy.' (Mr. Foucault).

The students made a few strong statements about disliking primary source reading. They commented that it was 'hard' or 'confusing' and that 'you know, those ancient Greek philosophers...wrote in a weird way' (Phaedo student) and 'it's hard to relate to someone who lived in the sixteenth century writing in Latin' (Critias student). On further elaboration, though, some students clarified that the value of both primary and secondary sources depended on how the teacher used them:

'I think that if we do it [read primary sources] it's not one of those things that you just give out and [say] 'You have to read this at home.' I think that there needs to be... like, it needs to be a class discussion too.' (Sophist student)

'I do see value in the primary documents but definitely there's got to be some guidance.' (Phaedo student)

The teachers who expressed more confidence about the texts they assigned may have been more likely to integrate the readings into classroom activities in the manner preferred by the students. Mr. Marx, who said he assigns 'a lot' of primary readings, continued:

'I've never assigned an actual philosopher's writings that I have not actually read in the classroom with them. And that's a very effective way to do it. We go through, stop, "what does that mean? What does that mean?" (Mr. Marx)

Ms. Hobbes described how she prepares her students before assigning the famous Allegory of the Cave excerpt from Plato's *Republic*:

I'll start by putting images on the overhead so they only see the shadow. And then I'll show them what I'm holding, so usually I use animals, cut-outs of animals.... So they only see the shadow. And then I show them the two-dimensional. And then I get them to think about 'so, what's the difference between this and the three-dimensional, the *real* thing?' (Ms. Hobbes)

The effectiveness of the texts that are assigned, therefore, cannot be fully assessed in isolation from the manner in which a teacher incorporates them into the course or unpacks them for the students.

Media, popular culture, and 'relevance'

Irrespective of their stances on primary and secondary sources, both teachers and students overwhelmingly touted unconventional or non-philosophical texts as central to their teaching and learning experiences. Courses were enhanced by the use of feature films, YouTube clips, TED talks, websites, news articles, and pop culture. For many participants, using such sources confirmed philosophy's 'relevance' to young people today, and accounted for its appeal as a subject. Here, too, however, students were looking for the teacher to scaffold and connect the medium they were using in a way that made philosophical ideas more accessible. For example, one student described watching a whole video as 'really boring' (Phaedo student). But, he continued, 'Play a little more or play a 10-minute clip and then talk about it for the rest of the class. That was interesting, [be]cause that would engage us more' (Phaedo student).

Beyond the obvious appeal of these teaching tools, the use of media and contemporary cultural references in the philosophy courses is not surprising because the Grade 11 course explicitly names 'relevance of philosophy' as one of its four pillars (Appendix 1). For students,

'relevance' was often code for 'appears in mainstream entertainment.' As one student said: 'I think one of the best ways to learn philosophy is to not necessarily talk about Rene Descartes or Plato themselves but... we talked a lot about *The Matrix* and other things like that, and that helps us learn.' (Critias student) The popularity of the 'Popular Culture and Philosophy' book series in fact began with *The Matrix and Philosophy* (Irwin, 2002). Indeed, connecting philosophy to mainstream and popular culture is nothing new; Socrates' references to Homer, Hesiod, and Sophocles were a way of making philosophy 'relevant' to Athenians. While we may lament that philosophy's 'relevance' today must be demonstrated by its presence on YouTube, perhaps it is better to use mainstream entertainment to explain philosophical ideas than to draw from primary sources in a very superficial manner.

These general conclusions about the content and teaching strategies used in Ontario's philosophy courses provide important information about best practices, while raising questions about teachers' preparedness to teach philosophy, and teaching effectiveness in general. Because of the diversity of teachers responsible for philosophy courses in Ontario, and the flexibility of the curriculum itself, it is germane to further investigate the relationships between curricular guidelines, student preferences, and teachers' prior knowledge of philosophy in determining how best to deliver this curriculum.

Limitations and future research

Our findings and analyses are limited in several ways. While we sought to include a diverse spectrum of students, teachers, and schools in our sample, we cannot confirm whether our findings are representative of all the schools across the province that offer one or more philosophy courses. For logistical reasons, the schools in our sample were clustered within the Greater Toronto Area—although that is also where the vast majority of philosophy classes are offered. The teachers also self-selected into the study (often having been recruited by friends) and may be particularly passionate about discussing and improving their teaching of philosophy. Furthermore, for logistical reasons, the data from each school were collected in a concentrated period (usually four consecutive classes, with the teacher interview and focus group conducted before or after these classes). In some cases, this happened earlier in the semester, before they had covered much material, and in other cases our visits occurred when they had already completed most of the course. The effects of these differences on their conceptualizations of philosophy are unknown, though it should be stressed that our intention was not to determine the amount of information students had learned.

There are many further findings to be explored from this study. We have already indicated some areas that merit closer investigation, such as the meaning of 'critical thinking,' the threat of relativism, and the role of media in philosophy classes. In addition, we intend to analyze: the differences and similarities between ToK and the Ontario courses; whether the Ontario courses are taught differently in the Catholic system than in other public schools; correlations between a teacher's philosophical background and their teaching methods, as well as their students' conceptions of philosophy; parents' attitudes toward their children taking philosophy; impacts of philosophy on students' religious identification; and other personal impacts of taking philosophy as reported by students. All these points are topics for future publications.

While there are limitations to this study, it should be noted that, since this is the first significant study of the teaching and learning of philosophy in Ontario secondary schools, and since the field of philosophy in schools is itself in its infancy, the aim was for breadth and indications of future potential avenues for investigation. The data set is rich in material to help

deepen our understanding of the teaching and learning of philosophy in formal education at the pre-college level.

Conclusion

Because Ontario is the only English-speaking jurisdiction in North America to include philosophy courses in its high school curriculum, much can be learned via a close study of this province about how to teach philosophy at the high school level. Our preliminary findings from this large multi-dimensional study indicate that philosophy is a unique, beneficial subject in Ontario high schools that teachers enjoy teaching and students greatly value. Studying philosophy enhances students' thinking about other academic areas of study and in some cases opens them up to new ways of thinking about life and school. Students and teachers alike characterized philosophy as difficult, but rewarding. Nonetheless, there are considerable differences in how philosophy is taught and learned around the province. Some of these variations may have to do with teacher profiles and the particularities of individual schools and boards. The flexibility of the provincial curriculum appears to be an invitation for creative and responsive teaching; however, philosophy teachers' weak preparation can, by their own admission, be a hindrance to effective curriculum delivery. We have uncovered both pedagogical opportunities and challenges that are more likely to arise in the teaching of philosophy than in other subjects. Through further analysis of our data we hope to advance our understanding of philosophy's impact as a high school subject and suggest best practices for its implementation and promotion.

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References

- Australasian Association of Philosophy Working Party (2009). *The case for inclusion of philosophy in the National Curriculum*. Report submitted to the Australian Curriculum, Assessment and Reporting Authority.
- Annis, L.F. & Annis D.B. (1979). The impact of philosophy on students' critical thinking ability. Contemporary Educational Psychology, 4, 219-226.
- Ayim, M. (1976). A justification for teaching philosophy in the high school. The Journal of Pre-College Philosophy, 2(2), 20-22.
- Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999). Common misconceptions of critical thinking. *Journal of Curriculum Studies*, 31(3), 269-283.
- Bialystok, L. (2017). Philosophy across the curriculum and the question of teacher capacity. *Journal of Philosophy of Education* 51(4), 827-836.

- Blair, T. (2009). Who teaches K-12 critical thinking? In J. Sobocan, L. Groarke, R.H. Johnson & F. Ellett (Eds.), *Critical thinking education and assessment: Can higher order thinking be tested?* (pp. 267-280). London, UK: Althouse Press.
- Bogdan, R & Biklen, S. (1988). *Qualitative research for education: An introduction to theory and methods*. Toronto: Allyn and Bacon.
- Boyd, D. (1992). The moral part of pluralism as the plural part of moral education. In F.C. Power & D.K. Lapsely (Eds.), *Challenge of pluralism: Education, politics and values* (pp.141-167). Notre Dame, IN: University of Notre Dame Press.
- Burgh, G. (2003). Philosophy in schools: Education for democracy or democratic education? *Critical & Creative Thinking: The Australasian Journal of Philosophy in Schools*, 11(2), 18-30.
- Chetty, D., Gregory, M., Haynes, J., & Murris, K. (2017). The Routledge international handbook of philosophy for children. New York, NY: Routledge.
- Council for Education in World Citizenship. (2012). Wiser Wales: Developing philosophy for children in different school contexts in Wales 2009–2012: Final evaluation report. Cardiff, Wales: Welsh Centre for International Affairs.
- Creswell, B. (2001). Revolutionising school-based research. Forum, 43(2), 54-55.
- Dalgleish, A., Girard, P., & Davies, M. (2017). Critical thinking, bias and feminist philosophy: Building a better framework through collaboration. *Informal Logic*, 37(4), 351-369.
- Davis, J. (2013). Socrates in homeroom: A case study for integrating philosophy across a high school curriculum. *Teaching Philosophy*, 36(3), 217-238.
- Ennis, R., (1995). Critical thinking. New York, NY: Pearson.
- Facione, P. A. (1990). Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction.

 Research findings and recommendations. Newark, DE: American Philosophical Association. (ERIC Document Reproduction Service No. ED315423).
- Fisher, R. (2003). Teaching thinking: Philosophical enquiry in the classroom (2nd ed.). London: Continuum.
- Gieve, S. (1998). Comments on Dwight Atkinson's "A critical approach to critical thinking in TESOL": A reader reacts. *TESOL Quarterly*, 32(1), 123-129.
- Paul, R. (1990). McPeck's mistakes. In J. E. McPeck (Ed.), *Critical thinking: Dialogue and dialectic* (pp. 102–111). New York: Routledge.
- Goering, S., Shudak N., & Wartenberg, T. (Eds.) (2013). *Philosophy in schools: An introduction for philosophers and teachers*. New York, NY: Routledge.
- Government of Ontario. (2013). The Ontario Curriculum, Grades 9-12: Social Sciences and Humanities. Toronto, Ontario.
- Hand, M. (2018). On the distinctive educational value of philosophy. Journal of Philosophy in Schools, 4(2), 4-19.
- Hare, W. (1998). Critical thinking as an aim of education. *Inquiry*, 18(2), 38-51.
- Haroutunian-Gordon, S. (1998). Some issues in the critical thinking debate: Dead horses and red herrings, anyone? *Educational Theory*, 48(3), 411-425.
- Heck, R.H. (2004). Studying educational and social policy: Theoretical concepts and research methods. Mahwah, NJ: Lawrence Erlbaum.
- Irwin, W. (Ed). (2002). The Matrix and philosophy: Welcome to the desert of the real. Open Source: Chicago.
- Jopling, D. (2000). 'The coolest subject on the planet': How philosophy made its way into Ontario's high schools. Paper presented at the NAACI Conference, Vancouver, BC. Journal of Philosophy of Education, 51(4), 827-836.
- Lipman, M. (1984). The cultivation of reasoning through philosophy. Educational Leadership,

- 42(1), 51-56.
- Lipman, M. (1988). Philosophy goes to school. Temple University Press, Philadelphia.
- Lipman, M. (1991). Thinking in education. Cambridge: Cambridge University Press.
- Lukey, B. (2012). The high school philosopher in residence: What philosophy and philosophers can offer schools. *Educational Perspectives*, 44(1-2), 38-42.
- McPeck, J. Norris, S., Paul, R., & Siegel, H. (1990). Teaching critical thinking. New York, NY: Routledge.
- Norris, T. (2012). Philosophical questions about assessment in philosophy. In J.M. Lone and R. Israeloff (Eds.), *Philosophy and education: Introducing philosophy to young people* (pp.). Cambridge: Cambridge Scholarly Publications.
- Norris, T. (2015). Philosophical questions about the teaching of philosophy. Philosophical Inquiry in Education, 23(1), 62-72.
- Ontario Ministry of Education. (2013). The Ontario Curriculum Grades 9 to 12: Social Sciences and Humanities. Toronto, ON.
- Ontario School Information System. Education Facts, 2015-2016. Retrieved from http://www.edu.gov.on.ca/eng/educationFacts.html
- Onwuegbuzie, A. J., & Leech, N. L. (2007). Sampling designs in qualitative research: Making the sampling process more public. *The Qualitative Report, 12*(20), 238-254.
- Palys, T. (2008). Purposive sampling. In L. Given (Ed.), *The Sage encyclopedia of qualitative research methods, Vol. 2* (pp. 697-698). Los Angeles, CA: Sage Publications.
- Paquette, P. & Gini-Newman, L. (2003). Philosophy: Questions & theories. Toronto, ON: McGraw-Hill Ryerson.
- Patton, M. (1990). *Qualitative evaluation and research methods (2nd ed)*. Thousand Oaks, CA: Sage.
- Piaget, J. (1926). The language and thought of the child. London: Routledge.
- Pinto, L.E. (2012). Curriculum reform in Ontario: 'Common sense' policy processes and democratic possibilities. Toronto: University of Toronto Press.
- Pinto, L.E., McDonough, G. & Boyd, D. (2009). What would Socrates do? An exploratory study of methods, materials and pedagogies in high school philosophy. *Journal of Teaching and Learning*, 6(1), 69-82.
- Pinto, L.E., McDonough, G. & Boyd, D. (2011). High school philosophy teachers' use of textbooks: Critical thinking or teaching to the text? *Journal of Curriculum and Instruction*, 5(2), 45-78.
- Pinto, L.E. & Portelli, J.P (2009). The role and impact of critical thinking in democratic education: Challenges and possibilities. In J. Sobocan, L. Groarke, R.H. Johnson & F. Ellett (Eds.), *Critical thinking education and assessment: Can higher order thinking be tested?* (pp. 299-320). London: Althouse Press.
- Portelli, J.P. & Vibert, A. (2010). Curriculum of life. Education Canada, 42(2), 36-39.
- Siegel, H. (1988). Educating reason: Rationality, critical thinking, and education. London: Routledge.
- Sobocan, J., Groarke, L., Johnson, R.H. & Ellett, F. (Eds.) (2009). *Critical Thinking Education and Assessment: Can higher order thinking be tested?* London: Althouse Press.
- Sproule, W. (1999). Philosophy in action. Markham, ON: Fitzhenry and Whiteside.
- Tesch, R. (1990). Qualitative research: Analysis types and software tools. NY: Routledge Falmer.
- Topping, K.J., & Trickey, S. (2007). Collaborative philosophical inquiry for schoolchildren: Cognitive gains at 2-year follow-up. *British Journal of Educational Psychology*, 77(4), 787–796.

University of California Davis. (No date). Philosophy majors attain among the highest LSAT scores. http://philosophy.ucdavis.edu/about/quick-facts/lsat-advantage.

Velasquez, M. (1999). Philosophy: A text with readings (11th ed., 2011). Boston, MA: Wadsworth Cengage Learning.

Appendix 1: Comparison of Grade 11 & 12 Curriculum

Philosophy: The Big Questions, Grade 11 ,	Philosophy: Questions and Theories, Grade 12 , University	
University/College	Preparation (HZT4U) (OMET, 2013)	
Preparation (HZB3M) (OMET, 2013)		
Mandatory strands:	Mandatory strands:	
 Research and Inquiry (Exploring, Investigating, 	Research and Inquiry	
Processing, Communicating and Reflecting)	Philosophical Foundations	
 Philosophical Foundations (Identifying Big Questions, 		
Philosophers and Philosophical Traditions, Defining		
Terms and Concepts)	Core topics:	
Philosophical Skills (Philosophical Reasoning,	Teachers select at least TWO of: Metaphysics, Ethics,	
Evaluating Philosophical Responses to Big Questions,	and/or Epistemology	
Developing Philosophical Responses)	Supplementary topics:	
Relevance of Philosophy (to everyday life, to education	Teachers select at least one of: Philosophy of Science,	
and careers)	Aesthetics, or Social and Political Philosophy	