

**PROPOSED REGULATORY
AMENDMENT AND UPDATES
TO TECHNOLOGICAL
EDUCATION**

**TO THE MINISTRY OF
EDUCATION**

March 2024

ONTARIO ENGLISH
Catholic
Teachers
ASSOCIATION

The Ontario English Catholic Teachers' Association (OECTA) represents the 45,000 passionate and qualified teachers in Ontario's publicly funded English Catholic schools, from Kindergarten to Grade 12.

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1. INTRODUCTION

1.01 The Ontario English Catholic Teachers' Association (OECTA) welcomes the opportunity to offer input, on behalf of 45,000 teachers working in Ontario's publicly funded Catholic schools, as the government considers a regulatory amendment under the *Education Act*, which pertains to the authority of principals to assign teachers to teach recently announced technological education courses in Grades 9 and 10 (TAS10 and TAS20).

1.02 Over the past several years, the Ford Conservative government has highlighted science, technology, engineering, and mathematics (STEM) education as a key area of focus, in a purported effort to "align curriculum changes with the province's economic needs and place an emphasis on critical life and job skills, needed in the fast-growing skilled trades" (Ontario Newsroom 2022).

1.03 To briefly review a timeline of relevant events:

- In December 2022 the government announced that it would be developing a new technological education curriculum, beginning with revised courses in Grades 9 and 10, which would be offered starting in the 2024-25 school year (Ontario Newsroom 2022).
- In March 2023, the Ford Conservative government revealed that all students entering Grade 9 as of September 2024 will be mandated to earn a Grade 9 or Grade 10 technological education credit as part of their Ontario Secondary School Diploma (OSSD) (Ontario Newsroom 2023).
- In February of this year, the government posted a proposed amendment to Regulation 298, Subsection 19, under the *Education Act*, that "the Ministry [of Education] is exploring options to provide authority for principals to assign

teachers with technological education qualifications to teach (TAS1O) and (TAS2O) and to assign teachers with general education qualifications to teach (TAS1O) and (TAS2O) by mutual agreement for one school year, with the ability to renew based on need” (Government of Ontario 2024).

- 1.04** Unfortunately, in keeping with a well-established pattern, the Ford Conservative government made no attempt to consult with the Association, or any other education affiliate, prior to announcing these significant changes to publicly funded education – calling us in for a brief information session during the week the amendment was posted.
- 1.05** As will become evident throughout this submission, a number of issues and potential problems that plague the government’s proposed approach might have been pre-empted had the government sought the expertise of teachers, education workers, and their representatives ahead of time.
- 1.06** Chief among the Association’s concerns is the sheer lack of detail surrounding the proposed regulatory amendment – including any indication that the government has carefully thought through potential consequences, such as those to student learning and health and safety.
- 1.07** Typically, a proposed regulatory change of this nature would be accompanied by relevant information and documents, such as a consultation paper, guiding questions, an analysis of regulatory impact, and more. No such documentation or information is included along with this proposed regulatory amendment.

1.08 This approach betrays a lack of consideration that is counterproductive to effective policymaking – all the more so considering that it has been almost 15 months since the Ford Conservative government first announced these changes.

1.09 As a result of these informational gaps, this submission takes a thematic approach, posing a series of scenarios and questions that the government must consider as it pursues this regulatory amendment, as well as any related changes to secondary school graduation requirements and courses in technological education.

1.10 This submission is organized into the following sections:

- Introduction
- STEM, skilled trades, and the purpose of education
- Critical considerations
 - Teacher assignment and the de-professionalization of teaching
 - Impact on student learning and classroom experience
 - Infrastructure inequities
 - Health and safety concerns
 - Lack of necessary training for teachers
 - Scheduling considerations

2. STEM, SKILLED TRADES, AND THE PURPOSE OF EDUCATION

2.01 In each of the announcements regarding the proposed changes to technological education and OSSD requirements, Education Minister Stephen Lecce has placed considerable emphasis on the importance of STEM- and skilled trades-related education as a means to prepare students for “the jobs of the future” (Ontario Newsroom 2023; Ontario Newsroom 2022; Ontario Newsroom 2022a).

- 2.02** To punctuate his point, the minister highlighted construction, transportation, manufacturing, computer technology, hospitality, and communication as areas students should be exposed to, and noted that a mandatory technological education credit requirement could “guide them to a future career in the highly skilled workforce, including the skilled trades.”
- 2.03** The Association agrees with the benefits of elevating awareness of technological education and the skilled trades, and has always supported making regular updates to curriculum – provided that such updates are the result of meaningful consultation and collaboration with teachers and their representatives, and include the funding necessary to provide teachers with the necessary training and supports (OECTA 2024). It is also true that, with respect to both STEM- and skilled trades-related careers, there are current and ongoing barriers that result from labour force gaps and persistent social stigma.
- 2.04** There have been many recent news reports on the growing labour shortage in skilled trades, both in Ontario and across Canada, as the proportion of skilled trades workers aged 55 or older has reached an all-time high (CIBC Capital Markets 2023). This issue is particularly acute in the construction industry, where an estimated 300,000 workers will retire within the next decade (Butler 2023).
- 2.05** It is a longstanding and unfortunate reality that perceptions of the skilled trades remain disproportionately negative among youth, who often view this path as a “last-resort option for post-secondary education” (Menard 2022; Ministry of Labour 2021).

- 2.06** It is also true that a gender-based gap exists in STEM-related employment fields. Although people who identify as women comprise 47.5 per cent of Canada’s labour force, these individuals make up less than 25 per cent of people employed in STEM careers (Government of Canada 2024; Statistics Canada 2023). According to Statistics Canada, 34 per cent of Canadians with a STEM degree identify as women; however, these individuals comprise only 23 per cent of Canadians working in the fields of science and technology (Statistics Canada 2023).
- 2.07** Publicly funded education has a role to play in promoting STEM and the skilled trades as a rewarding career option. At the same time, we must always remember that the overarching goal of publicly funded education should be to prepare students with a broad range of values and competencies that will enable them to successfully adapt throughout their lives.
- 2.08** Laying a foundation of job-related abilities should be *one* function of the publicly funded education system. But we must also remain focused on the needs of students and the public, broadly – not the narrow and current desires of business interests. Put simply, while we can and should elevate STEM and the skilled trades within publicly funded education, we must ensure that “job-readiness” does not become the main or sole objective.
- 2.09** Parents, teachers, education workers, and the general public want students to be prepared to move the economy forward, but publicly funded education should be about much more. We must continue to seek a balance between instilling hard skills, encouraging collaboration, critical thinking, and problem solving, and fostering the development of thoughtful, creative, caring, well-rounded, and engaged citizens.

3. CRITICAL CONSIDERATIONS

3.01 As noted, the ability to provide feedback on the government's proposed regulatory amendment is made more difficult through the lack of detail and accompanying information that has been provided. As such, rather than being able to respond specifically to policy questions and/or proposals, this section outlines a series of themes, questions, and scenarios – along with associated recommendations – that the government must consider as this process unfolds.

3.02 Teacher assignment and the de-professionalization of teaching

Context

Before considering the potential consequences of this regulatory change, it is worth outlining the current landscape and process of teacher assignment. Regulation 298 states that, "In assigning or appointing a teacher to teach in a division or to teach a subject in a school, the principal of the school shall have due regard for the provision of the best possible program and the safety and well-being of the pupils." These assignments must be "in accordance with the qualifications recorded on his or her certificate of qualification and registration" (R.R.O. 1990, Reg. 298).

3.03 There are exceptions to the above, such as certain circumstances where principals may assign teachers who do not hold the required qualifications by mutual agreement of the teacher and the principal, and with the approval of the supervisory officer. In addition, there are circumstances whereby principals may assign teachers who do not hold the required qualifications through a Temporary Letter of Approval (TLA) process, granted by the minister. TLAs are only granted to certified teachers who do not possess qualifications in areas with restricted qualifications (i.e., technological education, special education, French as a second

language, etc.). And finally, if no certified teacher is available, the minister may grant a Letter of Permission (LOP) to an individual who is not a certified teacher (R.R.O. 1990, Reg. 298).

3.04 Against this background, the government is proposing the following regulatory amendment:

The Ministry is exploring options to provide authority for principals to assign teachers with technological education qualifications to teach (TAS10) and (TAS20) and to assign teachers with general education qualifications to teach (TAS10) and (TAS20) by mutual agreement for one school year, with the ability to renew based on need (Ontario Government 2024).

3.05 *Potential impact*

According to Ontario College of Teachers (OCT) data from 2022, there are approximately 5,700 teachers in Ontario who hold a technological education qualification. Given that roughly 150,000 students enter Grade 9 per year, and given the mandatory nature of the proposed Grade 9 or 10 technological education credit, it is simply not possible for all students to receive instruction in these courses from a teacher with a technological education qualification.

3.06 Although it is not clear whether the Ford Conservative government recognized or anticipated this fact prior to announcing the change to OSSD requirements, the ministry has responded by proposing to allow teachers with general education qualifications to teach the relevant courses, by time-limited mutual agreement between the principal and teacher.

- 3.07** However, this creates an additional complication. Given the number of teachers that will be required for the new mandatory technological education courses, there is a distinct possibility that principals will not be able to fill all of the required staffing spaces with certified teachers. As a result, the government's proposal may very well lead to an increased reliance on Letters of Permission (LOPs) to fill vacancies for the new Grades 9 and 10 technological education courses. This is neither desirable nor acceptable.
- 3.08** Publicly funded education in Ontario has already seen a dramatic increase in LOPs over the past several years. Looking specifically at publicly funded Catholic school boards, between 2019 and 2022 the number of LOPs issued increased by 97.6 per cent (Ministry of Education 2023, Ministry of Education 2022, Ministry of Education 2021, Ministry of Education 2020).
- 3.09** The government's desire to promote technological education cannot become an avenue that leads to greater reliance on uncertified and unqualified individuals in schools. The current crisis of teacher recruitment and retention (the so-called teacher shortage) has only served to highlight the vital importance of having a certified, qualified teacher leading every class.
- 3.10** At the March 2023 press conference, the Minister of Education was asked about the gap between the number of teachers who hold technological education qualifications and the number of teachers that would be required to satisfy staffing needs. The minister insisted that "We have a plan with respect to hiring more of these educators" (DeClerq 2023). To date, no such plan has been articulated. In fact, the teacher shortage has only grown more severe (Coppolino 2024).

- 3.11** Note, however, that the minister used the word “educators” instead of “teachers” when discussing staffing needs for technological education courses. When pressed further on the matter, the minister suggested that the government might look to “leverage [the] private sector” to meet demand (DeClerq 2023). These comments are deeply inappropriate, and demonstrate a complete lack of understanding about the vital role that certified, qualified teachers play in delivering world-class education to students.
- 3.12** Catholic teachers – and all teachers – are dedicated professionals who invest so much of their time, energy, and passion into nurturing the potential within each student and helping them to succeed and thrive. Every day, teachers draw on their considerable expertise and use their professional judgement to best support the students they serve. Any policy change that leads to an increased reliance on uncertified and unqualified individuals will result in the de-professionalization of teaching, and – as will be discussed in the subsequent section – will significantly hurt student learning and the classroom experience.
- 3.13** To be clear, **the goal must be for certified, qualified teachers to deliver these courses** – these teachers are best placed to provide the practical knowledge and skills that students need while managing the rigours of classroom learning. **If the government intends to include mandatory course offerings in technological education, a sufficient number of certified, qualified teachers must be hired to meet that demand.**
- 3.14** Doing this will require a comprehensive plan and investment as, currently, there are only three accredited providers in Ontario of the Honours Technological Education Specialist program – Queen’s University, the University of Windsor, and the Ontario

Institute for Studies in Education (OISE) at the University of Toronto. Given this, it is clear that **the government must properly invest in post-secondary education so that faculties of education across Ontario are able to offer Honours Technological Education Specialist programs, using a multi-session blended model.**

3.15 In attracting tradespeople into faculties of education to earn teaching certification and qualification, attention must be paid to the structure and timing of course delivery. Given the scheduling demands of individuals who are working in the trades, a traditional academic calendar may restrict some who otherwise could be interested in obtaining their teaching certification. At the same time, the structure of Honours Technological Education Specialist programs should reflect the realities and learning styles of participants who have come from industry and trades into faculties of education.

3.16 There are also questions around whether a tradesperson would *want* to enter the teaching profession in the current climate. With increased violence in schools, a crisis in recruitment and retention, and chronic underfunding, it is not a given that a person would forgo a lucrative career in the trades and instead willingly subject themselves to the disrespect that the Ford Conservative government has directed toward teachers since coming to office in 2018.

3.17 Impact on student learning and the classroom experience

Class size and composition

As proposed, the government's regulatory amendment has the potential to create a series of inconsistencies in how the new technological education courses are delivered – which, in turn, will impact student learning.

- 3.18** The government has indicated that the new technological education courses will be introductory and “hands on” (CBC 2023). However, it is unclear whether class size and composition have been factored into the proposed changes.
- 3.19** Research has clearly demonstrated the positive relationship between small class sizes and student success, which not only allows for greater frequency of teacher-student interaction, but also creates opportunity for teachers to employ a greater variety of instructional and differentiated strategies based on student needs (Schanzenbach 2014). The same holds true for the importance of class composition, which better enables teachers to adapt teaching strategies, as required (Manitoba Teachers’ Society 2019).
- 3.20** These considerations are important in every class – but perhaps even more so in a technological education course setting, where students of varying needs may be interacting with machinery and power tools. Although certain collective agreements provide for class size caps in technological education courses, this is not consistent across the sector. As such, the government should develop guidelines with respect to class size and composition in technological education courses.
- 3.21** The government will also need to be mindful of another potential consequence. Given the mandatory nature of these proposed technological education courses, teachers will be required to further engage in differentiated instructional strategies to meet students’ diverse needs. This will inevitably involve teachers making choices about “grouping” students in particular ways. While research suggests that some forms of grouping, by “activity” for example, can be beneficial (Francis et al. 2018), attention must be paid to avoid these groupings from becoming sustained or permanent features of the classroom.

3.22 If this were to occur, in addition to creating teacher workload issues, it could result in multiple in-class “streams.” Rather than reducing the stigma associated with skilled trades, this would simply reconstitute it within classrooms. The government must think seriously and deliberately about how to avoid this potential, and must ensure that careful, measured, and comprehensive supports are part of any implementation plan.

3.23 **The related issues of class size and composition affect teachers’ ability to plan and support student learning, and would be of heightened significance in technological education classrooms – they must be addressed by the government.** At the same time, **the government must also turn its attention to the issue of parental opt-outs and exemptions for students who, for a variety of reasons, may be unable to participate in the Grades 9 and 10 technological education courses.**

3.24 *Potential impact on student learning*

Related to the earlier discussion of teacher assignment, the government’s proposed changes may create instructional inconsistencies based on *who* is available to teach the proposed technological education courses.

3.25 First and foremost, if the government increases its reliance on uncertified and unqualified individuals to deliver these courses, this could have serious and negative consequences on the learning environment. An individual who comes from the private sector may have technical knowledge and can speak to on-the-job realities; however, it is unlikely for that person to have training on pedagogical delivery, differentiated instruction, student assessment, or classroom management. This situation would have a significant impact on the quality of learning and could

create health and safety risks in the classroom – creating a scenario that would be unfair, and potentially dangerous, for everyone in the learning environment.

- 3.26** Even in situations involving certified teachers, differences may emerge between those who possess technological education qualifications and those who possess general education qualifications. While every teacher strives to deliver the best possible instruction to their students, it is simply a fact that those with a technological education qualification – and industry experience – will possess a higher level of expertise on the subject matter. These individuals will be better suited to engage in the sorts of “hands-on” learning experiences that the minister has indicated should be part of the curriculum – while also bringing to bear their expertise in classroom management. This, in turn, will elevate the status of technological education within the publicly funded education system.
- 3.27** All of this underscores the benefits of staffing technological education courses with certified and qualified teachers. **The government must promote entry into faculties of education by individuals with industry and trades experience, so that they may obtain their teaching certification and technological education qualification. At the same time, the government must also create opportunities for current certified teachers to earn technological education qualifications, if they are interested in doing so.**
- 3.28** A further consideration pertains to the handling of tools and machinery. Currently, if a technological education teacher is absent, and the occasional teacher (OT) who covers their class does not possess the requisite qualification, the OT is not allowed to touch any machinery. However, the proposed regulatory amendment will allow teachers with general education qualifications to deliver these courses.

3.29 In this event, will teachers who possess general education qualifications be permitted to use machinery for Grades 9 and 10 technological education courses? This is an especially important consideration, given that the government will be relying on teachers with general education qualifications to teach these courses, but plans to provide no additional funding for training, in-servicing, or up-skilling (Ontario Government 2024).

3.30 It is important to note that Ontario has a strong offering of experiential learning programs – including co-op, the Ontario Youth Apprenticeship Program (OYAP), and Specialist High Skills Majors. These programs support high-quality learning, while giving individual students the opportunity to choose programs that suit their skills and interests in a variety of industries, including the skilled trades. As the government considers changes to technological education courses, it is important that any updates not *replace* the current offerings, but rather are used to *promote* students’ access to these experiential programs, through early exposure to careers in technological education and the skilled trades.

3.31 Infrastructure inequities

The government has indicated a desire to teach the proposed Grades 9 and 10 technological education courses in a dedicated space, within a classroom setting. However, this raises a number of important issues that pertain to the level of infrastructure and technology currently available in schools across Ontario.

3.32 Data show a persistent lack of funding in technology infrastructure, including poor or uneven internet connectivity in schools and insufficient access to technology-related professional development for teachers (People for Education 2019). In 2018, a report by the Auditor General of Ontario found that students’ access to

classroom technology varied widely across the province, as did the age of equipment and software (Auditor General of Ontario 2018).

- 3.33** Delving deeper into the topic of technological infrastructure equity, a 2020 survey by People for Education found that 65 per cent of elementary schools and 18 per cent of high schools in the province rely on fundraising to offset technological infrastructure costs. The study also indicated that, when accounting for inflation, per pupil funding to support the costs of computers and software in schools has not increased in over a decade.
- 3.34** In addition to software and devices, the government must take into account space considerations. It is important that the new technological education courses go beyond computer technology, and include a variety of relevant topics, such as cosmetology and hospitality, for instance. However, to do so, schools across the province must consistently have the infrastructure necessary to allow for such instruction. For instance, is it equitable that some students will learn about hospitality in an industrial kitchen setting, while others will be forced to only read about food preparation in a textbook in a traditional classroom setting with space limitations?
- 3.35** The successful implementation of mandatory technological education – that covers a broad range of topics, with hands-on learning, in a dedicated space – requires that the necessary infrastructure exist. **The government must provide comprehensive and stable funding to ensure that every school in Ontario possesses the technological infrastructure required to successfully deliver technological education, and meet students’ needs.**

3.36 Health and safety concerns

One glaring weakness of the government's proposed regulatory amendment is the complete absence of discussion around health and safety.

3.37 Classroom practice and all aspects of the learning environment must comply with relevant municipal, provincial, and/or federal health and safety legislation, including:

- the *Occupational Health and Safety Act*;
- the *Ontario Workplace Safety and Insurance Act*;
- the Workplace Hazardous Materials Information System (WHMIS);
- the *Food and Drugs Act*;
- the *Ontario Health Protection and Promotion Act*;
- the Ontario Building Code; and
- local by-laws

3.38 In satisfying these obligations, teachers are responsible for ensuring the safety of students during technology lab, shop, and classroom activities. As such, strict regulations have been developed around who can teach technological education courses due to the myriad health and safety issues. In this respect, school safety requirements differ significantly from jobsite safety protocols. Even within schools, there are specific protocols related to the handling and disposal of biohazardous and other toxic materials – protocols that would be unfamiliar to teachers with general education qualifications.

3.39 The government's proposed changes raise significant concerns around how to maintain the highest standards of health and safety for staff and students alike – especially considering that no additional funding will be provided to train uncertified

individuals or teachers who do not possess technological education qualifications. While there are some quality resources that have been produced by external organizations – such as "First Job, Safe Job," created by Workplace Safety & Prevention Services – the government must go further in order to address health and safety concerns that are unique to classrooms and schools, given the nature of the proposed changes.

3.40 These are not theoretical matters: there are real-world health and safety concerns that the government and school boards must grapple with, as well as liability and risk management issues that the Ontario School Boards' Insurance Exchange (OSBIE) must address.

3.41 As such, it is imperative that **the government provide subject-specific health and safety training for all teachers who will be teaching technological education courses. This training must be delivered in-person by a certified expert in the field, completed before the technological education course begins, and must include opportunities for additional training on an ongoing basis.**

3.42 The issue of health and safety also reinforces the importance of addressing class composition and size. In a mandatory technological education course with 30 students, it is likely that several students may possess special education needs or exceptionalities – behavioural, communicational, intellectual, physical, and/or multiple. In this setting, the introduction of tools and machinery could present additional layers of complexity and challenges for classroom management.

3.43 Lack of necessary training for teachers

Teachers are dedicated lifelong learners, who continually upgrade their knowledge and skills, often on their own time and at their own expense, to ensure they remain apprised of what is current and effective in classrooms.

3.44 Ideally, curriculum updates and implementation involve structured, teacher-led training and in-servicing, funded by the government and employer school boards during the school day – and including ongoing opportunities to meet with peers to collaborate, share classroom experiences and challenges, and refine methods over a period of at least two years (Wong 2020).

3.45 Unfortunately, the government has too often chosen to implement sweeping changes without providing teachers much-needed opportunities for professional learning. The current proposed regulatory amendment around technological education appears to be yet another example. To date, the government has provided no details about the specifics of the new curriculum or its status, and has indicated that no additional funding will be provided to support teacher training.

3.46 When questioned about the proposed lack of training and in-servicing, the government suggested that a webinar may be developed or that a ministry-mandated Professional Activity (PA) Day may be dedicated to technological education training. These responses show a lack of thoughtfulness or due consideration about the tools, time, and resources necessary for teachers to successfully implement substantive curriculum changes.

3.47 A webinar does not provide the training and support necessary for teachers to feel comfortable and confident in delivering instruction on this topic – especially given

the number of teachers who will be required to teach these courses, but do not possess technological education qualifications. With respect to PA Days, given that these are already dedicated to other ministry-mandated topics, specifically which current PA Day topic is the ministry proposing to eliminate in order to accommodate training on technological education?

3.48 To promote success, **the government must provide funding for school boards to provide ongoing teacher training and in-servicing, during the school day, on a variety of relevant topics, including health and safety, the use of technology and machinery, as well as opportunities for certified teachers to earn technological education qualifications.**

3.49 Scheduling considerations

The introduction of a mandatory technological education credit is meant to broaden students' exposure to STEM and the skilled trades. At the same time, the government should remain aware of the potential impacts this may have on class scheduling for some students.

3.50 The situation is particularly acute in the publicly funded Catholic education system, where students earn four credits in religious education as part of their OSSD completion. In publicly funded Catholic schools, the addition of a mandatory credit in technological education would mean that, to receive their OSSD, students will now be required to earn 19 compulsory credits and four credits in religious education, leaving only seven optional credits, for a total of 30 secondary school credits.

- 3.51** The proposed changes raise questions around exemptions and opt-outs. For instance, if a Grade 10 student at a publicly funded Catholic school is singularly focused on pursuing an academic career in medical sciences, would that student be permitted to opt-out (with parental consent) of the mandatory technological education credit in order to complete additional credits in science and math, which may be pre-requisites for their desired post-secondary education program? Conversely, this situation may force students who wish to complete additional optional credits, working toward their desired post-secondary education program, to postpone their graduation in order to complete the additional optional credits.
- 3.52** As such, **the government must turn its attention to the parameters and procedures for student exemptions and parental opt-out options for the proposed technological education courses.**

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