

TC Document

I. Basic Information for TC

▪ Country/Region:	BRAZIL
▪ TC Name:	Pilot for modular TVET in São Paulo's digital industries
▪ TC Number:	BR-T1460
▪ Team Leader/Members:	Gouvea Gomes, Livia (SCL/LMK) Team Leader; Duenas Herrera, Ximena (SCL/EDU) Alternate Team Leader; Bentata, Claire (SCL/LMK); Carpizo Riva Palacio, Carlos Ignacio (VPC/FMP); Cossi Fernandes, Joao Paulo (SCL/EDU); Garcia Valero, Andrea Carolina (SCL/LMK); Gonzalez Herrera, Beatriz Maria (SCL/LMK); Hernandez-Cartagena, Carolina L. (SCL/LMK); Penaherrera Proano, Sebastian (SCL/LMK); Salazar, David Agustin (VPC/FMP); Urquidi Zijderveld, Manuel Enrique (SCL/LMK); Valente Lins, Paula (CSC/CBR); Verissimo Da Silva, Carolina (LEG/SGO); Eghbali, Padydeh Carpizo, Carlos (VPC/FMP); Salazar, David (VPC/FMP); Eghbali, Padydeh
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	.
▪ Date of TC Abstract authorization:	14 Aug 2020.
▪ Beneficiary:	State of São Paulo, through the Secretariat of Economic Development
▪ Executing Agency and contact name:	Inter-American Development Bank, Fundacao Itau Para A Educacao E Cultura (Component 1 and 3); and <i>Fundação Itaú para Educação e Cultura</i> (Component 2)
▪ Donors providing funding:	Multi-Donor Fund for the Transformation of Technical and Vocational Education and Training(TVT)
▪ IDB Funding Requested:	US\$600,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	36 Months ¹
▪ Required start date:	December 15, 2020
▪ Types of consultants:	Individual consultants and consulting firms
▪ Prepared by Unit:	SCL/LMK-Labor Markets
▪ Unit of Disbursement Responsibility:	CSC/CBR-Country Office Brazil
▪ TC included in Country Strategy (y/n):	N
▪ TC included in CPD (y/n):	N
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Productivity and innovation; Social inclusion and equality

II. Objectives and Justification of the TC

2.1 Ensuring that young people acquire the skills necessary to perform well in the labor market is a challenge in policy formulation in Brazil. To address this challenge, this

¹ For the purposes of Component 2, the disbursement period shall begin counting from the effective date of the letter of agreement to be signed between the IDB and the Fundação Itaú para Educação e Cultura.

Technical Cooperation (TC) will support the development of a pilot project for the Secretariat for Economic Development in the state of São Paulo (SDE-SP)², which optimizes matching between young people with labor-market relevant skills and digital industries. The pilot will be monitored by usage and results assessments to generate lessons for future actions with students from other careers and regions (in Brazil or other countries), and for the improvement of the own system. The context of this initiative is particularly strategic: that of implementing a modular approach to high school (HS), which gives students the flexibility to choose their path through different disciplines, to obtain a certification³. To meet the general objective of preparing technical education students for the labor market of the future, the TC will finance (i) the consolidation of an innovative profiling tool to assess students, based on students' skills, preferences and competences; (ii) the development of a machine learning algorithm to match students' profiles with labor market occupations, and indicate possible ways, in the context of modular teaching, to obtain certifications associated with these occupations; and (iii) the strengthening of the connection between the demands of the productive sector and the skills learned in technical and professional schools.

- 2.2 Each component financed by this TC is associated with a specific objective, which are, respectively: (i) to increase students' agency by providing vocational guidance based on students' preferences, socio-emotional skills, and pre-acquired hard skills, using their full potential in their education; (ii) to improve the matching of the demand for skills and supply in digital careers by guiding the student to achieve the right career fit in the context of a modular learning labor pathway; and (iii) to increase private sector involvement in the definition and certification of skills by developing standard processes for occupational profiles. The TC will support the creation of integrated digital tools to support students in the face of the possibility of modular teaching, in an innovative way that: (i) integrates different actors in this process (students, schools, and companies in the digital private sector); (ii) uses digital tools that allows individualized recommendations for students; (iii) creates direct channels for feedbacks, allowing updates and improvement of the tools. In addition to the innovative aspect, these characteristics give sustainability to the project in the long term, by allowing for the continuous updating or changes in what is demanded in the labor market⁴. Besides, the TC provides for an evaluation of results, which will enable both improvements to the tools developed, as well as lessons for other future initiatives.
- 2.3 The pilot is focused on digital careers, for students from public schools in São Paulo, but can be scaled to include: (i) further occupational profiles, insofar as they are identified as potentially employment creating; and (ii) other regions and countries, serving as an example for a certified, modular, and labor-market-oriented approach to technical and vocational education and training (TVET). In addition to the reports and evaluation materials, the algorithms financed by this TC will also be made public⁵. Said algorithms may serve as input for other states in Brazil or other countries in the region

² In the Government of the State of São Paulo, the responsibility for technical education lies under the SDE, and not under the Secretariat of Education.

³ The modular approach to high school was made possible with the High School Reform of 2017 by the Federal Government of Brazil, and the states of the federation will implement it.

⁴ In Component 3, there is a more detailed description of the strategy for this constant update.

⁵ The publication of the knowledge products financed by this TC will follow the procedures for the publication of knowledge products (AM-331), as applicable.

that may want to adopt a similar strategy. For example, the pilot can serve as a reference in the Brazilian context, where the implementation of a reform in HS is underway in the states. The Federal Government of Brazil launched its HS reform in 2017, with three main pillars⁶: (i) implement a new curriculum that incorporates 21st century skills to increase students' leadership, socio-emotional and digital skills; (ii) create five flexible pathways (math, language, social sciences and humanities, natural sciences, and technical and professional, or TEHS⁷) to give students more choices to further study subjects they prefer; and (iii) increase the enrollment of students attending full-time schools⁸ and TEHS courses⁹.

- 2.4 In parallel to the HS reform's implementation, which was designed and just approved in the state of São Paulo, the local government wants to capitalize on its economic capacity by building a thriving labor market. The latter objective of the HS reform, aimed at facilitating access to technical and vocational education for students, is crucial for improving labor market responsiveness in the state of São Paulo, which concentrates an impressive part of Brazil's productive power: the state has more than 5 million companies (31% of Brazilian companies), with a GDP of around US\$486 billion (32% of Brazilian GDP). Regarding the technological sector, there is an even greater concentration: 43% of the people employed in the information technology sector in Brazil are in the state of São Paulo¹⁰. However, despite the economic dynamism, young people face problems in the labor market, as 24% of people between 18 and 24 years old are unemployed in São Paulo, a number which is slightly above the national average for Brazil (23.8%). This adverse scenario occurs at the same time as there is a great demand for professionals in the technology sector. In Brazil as a whole, tech-sector companies report difficulties in hiring talent in these areas¹¹, with this trend being very strongly pronounced in the state of São Paulo. According to estimates, São Paulo will concentrate 36% of the annual demand of 70 thousand professionals per year, in Brazil, between 2019 and 2024¹².
- 2.5 Along this line, SDE-SP is interested in leveraging the significant potential of its private sector, aligning the skills acquired in HS with labor market needs. For this purpose, it will be necessary to use the power of technology for gaining a deep understanding of student profiles, the requirements of the productive sector, and the creation of a smart matching tool. Using technology, the pilot will provide support to students in a customized and personalized way, considering their innate characteristics, skills, preferences, and choices. Due to the scale of the intervention, customized treatment would be impossible in the absence of digital strategies. The actions are aimed at encouraging young people to take up technological careers, indicating professional career paths appropriate to the behavioral and skills profile of each student. The SDE-SP will act in close partnership with the Centro Paula Souza (CPS), the São

⁶ Brazilian Ministry of Education - MEC.

⁷ Technical Education for High School.

⁸ The National Education Plan (PNE) has a target of 25% of students enrolled in full-time schooling by 2024.

⁹ PNE defines that TEHS should triple from 2014 to 2024. In 2014, Integrated TEHS was 4.4% of total HS enrollment (366,959 out of 8,300,189). In 2018, Integrated TEHS increased to 6.6% (505,791 out of 7,709,929).

¹⁰ <https://brasscom.org.br/relatorio-setorial-de-tic-2019/>

¹¹ <https://www.mckinsey.com/br/our-insights/transformacoes-digitais-no-brasil>

¹² [Formação Educacional e Empregabilidade em TIC - Brasscom](#)

Paulo State government agency linked to SDE and responsible for Professional and Technical Education in the State¹³.

- 2.6 The program will also take the first steps towards an effective integration between TVET and the productive sector, as it strengthens the dialogue with companies, aims at understanding their demands, and offers students guidance on strategies for online training in the required skills. Additionally, the pilot will create the foundations to update TVET curricula to the demands observed by companies since the TEHS curriculum is not responsive to labor market needs. TEHS programs and practices were defined a decade ago, and responsible government agencies lack systematic mechanisms for establishing a relationship between TEHS program offerings and skills demanded by employers. Therefore, many technical/vocational programs have limited relevance and pertinence for employers.¹⁴ Along the same line, many Brazilian students expressed that if HS made them better equipped for finding a job, their incentives to pursuing a successful school-to-work transition would be increased¹⁵. The long run objective is that the TVET curricula reflect the requirements for excellent performance in the labor market. The present project will support the creation and strengthening of channels for this purpose.
- 2.7 **Private Sector Participation.** The TC proposes to promote collaboration between the participating government authorities, the private sector and civil society to encourage the sustainable transformation of the TVET ecosystem in the State of São Paulo. For this purpose, the participation of Fundação Itáu para a Educação e Cultura (FIEC) is envisaged for investing in the vocational instrument's methodological development, for creating methodological reports, and for supporting the creation of professional pathways for the participating students. FIEC has extensive experience in technical and professional education policy and conducts related projects in different parts of Brazil. As such, it is also proposed that FIEC execute Component 2 of the TC. Additionally, the TC has the support of IT companies, such as IBM and GFT, and Meu Futuro Digital, an institution that encourages IT education in Brazil. The role of IT companies will be especially relevant for the strengthening of channels between the productive sector and the educational system, providing information on the skills required in the sector's occupations. The participation of the private sector is essential because it provides information on the skills demanded in the labor markets, facilitating the matching with quality jobs in the future (Component1), and providing periodic updates on this information (Component 3) (see Annexes for Letters of Commitment).
- 2.8 Aligning labor market entrants' skills with productive sector requirements improves the match between supply and demand. National and international evidence confirms that aligning curricular content with labor markets' demands can increase youth employability¹⁶. This finding is consistent with evidence showing that technical education can increase student motivation and engagement¹⁷ and lead to a successful school to work transition¹⁸. At the same time, several studies have demonstrated the

¹³ CPS has 185 courses and more than 300 thousand students.

¹⁴ [Bassi et al., 2012.](#)

¹⁵ [Fernandes, 2010.](#)

¹⁶ [Eichhorst, 2015;](#) [Hanushek et al., 2011;](#) [Ryan, 2001.](#)

¹⁷ [Carbonaro, 2005.](#)

¹⁸ [Dougherty, 2018.](#)

positive effect of in-company training and on-the-job learning for increasing productivity, innovation, and technology adoption¹⁹, which ultimately lead to an increase in productivity and economic development²⁰.

- 2.9 The TC's implementation strategy also considers carrying out dissemination campaigns focused on ensuring diversity. In other words, by monitoring the composition of users, it will be possible to identify groups with lower representation in training programs and technological profiles and put in place strategies focused on such groups. For instance, when specifically analyzing technology jobs, women only represent between 2% and 45% of technology workers and earn 18% less than men²¹. Lastly, the development of student profiles and matching algorithms will be accompanied by the development of protocols to ensure an ethical use of technology. The activities will align to the key objectives put forward under the Inter-American Development Bank's (IDB) fAIrLAC initiative²²: (i) algorithmic fairness and justice; (ii) information security, and protection; (iii) prepared and inclusive region; (iv) human-centered artificial intelligence (AI); and (v) transparency, explicability and accountability.
- 2.10 **Strategic Alignment.** The proposed TC is consistent with the Update to the Institutional Strategy (UIS) 2020-2023 (AB-3190-2) and is strategically aligned with the development challenge of: (i) social inclusion and equality by improving students' employability and productive capacity; and (ii) productivity and innovation, in the area of human capital development, by focusing on the expansion of TEHS based on the demand for skilled work in digital industries. The TC is also aligned with the cross-cutting themes of: (i) gender equality and diversity promoting actions to decrease the gap between boys and girls who choose better paying careers; and (ii) institutional capacity and rule of law by facilitating the use of digital technologies and big data within SDE-SP, which will allow for better, more transparent and more efficient decision making. The TC also seeks to contribute towards the students benefited by education projects indicator of the Corporate Results Framework (CRF) (GN-2727-12). Following this line, the TC is also aligned with one of the strategic objectives defined in the IDB Group Country Strategy with Brazil 2019-2022 (GN-2973): improve management and the quality of spending and infrastructure in the health and education sectors. It is synchronized with the Skills Development Sector Framework Document (GN-3012-3) and its lines of action of: (i) ensuring access to high-quality and relevant learning opportunities throughout life; (ii) strengthening quality and relevance assurance mechanisms of learning; and (iii) leveraging the use of technology to increase equitable access to skills development opportunities and improve the efficiency of skill development systems, as well as with the Labor Sector Framework Document (GN-2741-7), which promotes the collaboration in multisectoral

¹⁹ [Dostie, 2014](#); [Bauernschuter et al., 2009](#).

²⁰ Many Brazilian students expressed that if HS would help them to find a job, they would have enough incentive to graduate ([Fernandes, 2010](#)), what is consistent with evidence showing that technical education can increase student employability and earnings ([Reis, 2014](#)).

²¹ [Mari, 2019](#); [Bohnet, 2016](#).

²² The initiative [fAIrLAC](#) organized by IADB brings together a network of professionals and experts to promote an ethical application of AI in LAC.

teams. It also is consistent with the Education and Early Childhood Development Sector Framework Document (GN-2708-5) in Dimension 5 that “all children and young people acquire the necessary skills to be productive and contribute to society.” Finally, the proposed TC is aligned with the key elements of the Multi-Donor Fund for the Transformation of Technical and Vocational Education and Training (TVET Fund, SC-569), because: (i) it includes the participation of the proven sector; (ii) it is innovative; and (iii) it is scalable (to other states in Brazil or countries in the LAC region).

- 2.11 **Complementarity with other initiatives.** The TC is supplementary to IDB’s work to prepare students with the skills needed to thrive in a constantly changing labor market (IDB-TN-1328), which has guided IDB’s work on TVET projects (ATN/OC-17398-DR, ATN/OC-15890-CH, 4798/OC-BL). Especially, it complements the programs on the importance of a strong cooperation between learning institutions and the private sector to identify and update the skills required by employers (4692/OC-DR, 3787/OC-BH, 2739/OC-BA, 3547/OC-PE, 4645/OC-JA) as well as those supporting curricular transformations to ensure these skill needs are formally incorporated in the education system (3539/OC-CH; 4555/OC-PE). In addition, the TC is aligned with existing interventions in the areas of employment and High School in Brazil (2933/OC-BR, 2992/OC-BR; ATN/OC-14492-BR, ATN/JO-14326-BR). The TC also has complementarities with the fAirlAC initiative, which promotes ethical and responsible use of AI in LAC.

III. Description of activities/components and budget

- 3.1 This TC will finance the following components:

- 3.2 **Component 1: Student profiling tool.** This component will finance individual consultants and/or consulting firms for the consolidation of an innovative profiling tool to assess TVET students in the state of São Paulo. For this propose, activities consist of developing tests to assess the consistency of students’ self-reported information and thus ensuring a precise profile tool. Student information will come from a survey tool developed by supporters from the private sector²³ and supplemented by school administrative records (provided by CPS)²⁴. In addition to this tool, these partners will also support the elaboration of occupational profile benchmarks in digital jobs, based on information from the sector. This tool will make it possible to indicate to each individual student which career in the digital sector is best suited to their profile and show that different profiles do have space in technological areas. In this framework, by specifically financing the development of tests, this TC contributes by improving accuracy for an innovative profile tool, which based on rich and individualized information, can: (i) give personalized recommendations; (ii) be updated continuously, according to the decisions taken at each moment; (iii) connect information from students, companies, and schools; and (iv) identify and correct potential biases. The component will result in the availability of profiling data both for the students as well as the SDE-SP, that serves as input for Component 2, which will suggest educational

²³ Itaú Foundation for Education and Culture.

²⁴ If the information mentioned herein is not public and includes personal data, the project team will consult with the Bank’s Information Technology Department to ensure that adequate measures are taken for the management/protection of said information. Additionally, LEG will be consulted if any arrangements for the use or confidentiality of the information are required.

pathways recommendations, considering matchings between the students' profiles and job profiles.

3.3 Component 2: Pathway recommendation tool. This component will finance individual consultants and/or consulting firms for the development of a vocational recommendation method for young people, and a tool that gives young people access to the recommendations. The methodology will be based on the matching of the students' profiles to occupational profiles, being the central element of the pilot. The specific objective associated to this component is to improve the matching between skills demanded by firms and offered by students. Activities that will be carried out include the extraction of data from the profiling tool (developed under the Component 1) as well as data available from job descriptions and occupational profiles from within digital industries to inform the algorithm's set-up. The algorithm will guide the student throughout his education years, in a personalized and flexible way. Personalized because it considers individual information (generated from Component 1). Flexible because the orientation is adjusted to each student's choice at any time, who is free to follow or not the recommendation. This flexibility tends to increase student adherence and the better use of modular teaching. The code for this algorithm will be made available to the public, so that it could serve as a subsidy for other similar interventions in the future, in Brazil or in other countries. The recommendation issued by the tool will be customized to each student's needs and will be sensitive to diversity criteria and potential discriminatory elements (such as gender, socioeconomic background, disability) to allow for a more equitable access to successful education labor trajectories. Similarly, it will include recommendations on how to obtain a certification in their occupation of choice, allowing for a flexible array of modules offered by varied providers, both from the public and the private sphere. This component will result in the availability of career pathway information via a digital recommendation tool for the initially profiled students. Career paths will consider the initial inputs provided by the private sector, regarding the skills required in the digital industry, and then they will be updated according to permanent contributions, developed under Component 3. This component will also finance dissemination strategies to students, and for vulnerable groups and minority students. Moreover, the TC will consider the ethical use of technology, considering one of the main objectives of fAIRLAC initiative: avoid biases in the construction of algorithms that could extend inequalities²⁵. The final products of this component include: (i) the pathway recommendation tool; (ii) communications strategies directed to students; and (iii) an evaluation report, analyzing student engagement, user problems, strengths, and points for improvement.

3.4 Component 3: Students' connection with the demands of the productive sector. This component will finance actions to bring together companies that demand skills from schools that will equip their students with such skills. The objective is to align the education system more closely with the demands of the productive sector. The participation of companies is necessary not only to give the starting point, with the determination of the skills valued in the digital sector and the design of learning modules, but also in the continuous updating of this information. To ensure a permanent engagement, the TC will finance knowledge inputs for workshops and meetings to hold essential players in sector periodic councils, with strategic industry

²⁵ For example, it will be assessed how sensitive the results of the algorithms are to inputs such as gender and race. Also, we develop management mechanisms to address these aspects recurrently.

representatives²⁶ leading dialogues with firms and SDE-SP. Thus, Component 3 helps in the continuous updating of the pathway recommendation tool developed under Component 2, to ensure the constant adequacy of modular courses. In addition to strategic leadership, the perception of the companies that their participation helps them to have the supply of human capital demanded in the medium and long term will contribute to their strong engagement. Additionally, this component will support student obtaining certifications by: (i) supporting the creation of intermediate certifications for courses taken within the scope of SDE--SP²⁷²⁸; (ii) designing methods for SDE-SP to assess and, if appropriate, recognize course certificates provided by the private sector²⁹, based on the strong partnership environment created with private companies. This will allow for students to effectively signal their acquired skills in a clear and objective way for companies that may hire them in the future.

- 3.5 **TC result evaluation.** A TC result evaluation will also be financed. The evaluation will include results concerning the following outcomes: (i) percentage of students that rate the profiling tool as beyond satisfactory, with a target of 80%; (ii) percentage of students that rate the strategy is beyond satisfactory, with a target of 80%; and (iii) number of standard processes for participatory occupational profile development elaborated, with a target of (iii). The results (i) and (iii) will be generated from surveys conducted by SDE-SP, with its students. Additionally, to demonstrate the general results of the TC, an evaluation report which shall consider the following aspects will be financed: (i) performance of students using the financed tools to the completion of the course, from the administrative records of SDE-SP; and (ii) adequacy³⁰ of skills perceived in these future professionals by companies in the digital sector that hire them, from surveys with companies in the sector. This assessment will enable continuous improvements in the tools to better adapt to the challenges.
- 3.6 The total cost of this TC is US\$600,000 in non-reimbursable resources, which will be financed by the Multi-donor Fund for the Transformation on Technical and Vocational Education in Latin America and the Caribbean (TVT), as detailed in the chart below. No counterpart funding is contemplated.

Indicative Budget

Activity/Comp	Description	IDB Funding	Total
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²⁶ Brasscom (Brazilian Association of Information and Communication Technology Companies) would be this actor since it has a close relation and a strong reputation with companies.

²⁷ Through technical support, in the identification of modules that make up a specific area of knowledge.

²⁸ Intermediate certifications are authorized in Vocational and Technological Education by resolutions CNE / CEB No. 04/99, in the case of High School Technical Education, and CNE/CP No. 3/02, in Higher Technological Education. However, at the Higher Technological Education, this possibility is still little explored by the institutions.

²⁹ The implementation of the proposed design will depend on approval at a higher level by the government.

³⁰ To consider as adequacy how much the company considers that young people who have just graduated and hired have skills that are necessary for their occupations.

onent		IDB Executing	FIEC Executing	Funding
Component 1: Student profiling tool	(i) Development of tests to assess the consistency of students' self-reported information	28,000		28,000
Component 2: Pathway recommendati on tool	(i) Development and implementation of recommendation strategies on educational trajectories			460,000
	(i.i) design sprint;		34,000	
	(i.ii) development of technical specifications		40,000	
	(i.iii) implementation of recommendation strategies tool		130,000	
	(i.iv) methodological improvements.		136,000	
	(ii) Communication and dissemination strategies to students. Special strategies focused on minorities and vulnerable people (videos, infographics, texts, etc, over all 3 years of the project)		90,000	
	(iii) Usage evaluation report, analyzing engagement, strengths, and problems of the strategy		30,000	
Component 3: Students' connection with the demands of the productive sector	(i) Knowledge inputs for workshops with private companies in the technological sector to identify sector-based skill needs.	20,000		68,000
	(ii) Development of report with identification of sector-based skill needs.	10,000		
	(iii) Development of a method of certification of acquired skills.	38,000		
	TC result evaluation	34,000		34,000
	Unforeseen costs	10,000		10,000
Total		140,000	460,000	600,000

IV. Executing agency and execution structure

- 4.1 As requested by the State of São Paulo, through the Secretariat for Economic Development (SDE-SP) (Ofício GS-116/2020) and approved by the Brazilian Agency of Cooperation (ABC) (*Ofício nº 09025.000928/2020-32*) (See Annexes), the executing agency of this TC will be the IDB and FIEC. The IDB will be responsible for the execution of components 1 and 3, and has developed a strong relationship with SDE-SP during various interactions regarding potential interventions to improve labor market outcomes in the state. Accordingly, SDE-SP has requested that the IDB

execute these components of the TC to supplement its experience and technical capacity and ensure the duly and timely execution of the activities provided for in the TC. The FIEC will be responsible for the execution of Component 2 (see Annex for Letter of Commitment), and it will contribute with its expertise in actions and knowledge production to strengthen professional and technical education in Brazil. The IDB will sign a TC Agreement with FIEC to formalize the terms and conditions of the transfer and use of the non-reimbursable technical cooperation resources allocated to Component 2.

- 4.2 FIEC is a private, non-profit foundation, and was created by Itaú Unibanco, which for more than 30 years have developed several programs committed to improving Brazilian public education. FIEC will use its systems for procurement, financial management and reporting, project management, and monitoring and evaluation of the project effectiveness in what relates to Component 2 of the TC. A training regarding IDBs financial procedures will be scheduled after the approval of the TC and before starting the execution of Component 2 of the TC.
- 4.3 The active role of the Bank in this TC may have positive externalities for other countries in the region, as part of the efforts to support the countries in the post-pandemic economic (and employment) recovery. The IDB can further ensure independent and transparent execution of TC components 1 and 3 by: (i) coordinating project implementation; (ii) carrying out the contracting processes for consulting services; and (iii) supervising the activities to be carried out by the consulting firms and individual consultants. Finally, the IDB, with its relationship with Consed (the national council of head of state departments of education) will be able to scale the learnings from this initiative to other states. Design, coordination and supervision of this TC and its disbursement will be tasked to the IDB's Labor Market and Education Divisions within the Social Sector (SCL/LMK and SCL/EDU). Disbursement will be tasked to the Brazil Country Office (CSC/CBR). The TC disbursement and execution period will be 36 months.
- 4.4 For the execution of this TC, the IDB can draw on lessons learned in both technical and operational aspects. The IDB Group is working on several related projects in Chile (ATN/OC-17761-CH, ATN/OC-18060-CH) and Costa Rica (ATN/ME-16673-CR).
- 4.5 The IDB will maintain a close and constant dialogue with SDE-SP through all stages of execution. While the IDB will supervise consultancy, services contracted for the delivery of the Components 1 and 3, officials from SDE-SP will provide technical inputs to the Terms of Reference and their completion. In what relates to the execution of Component 2, the IDB, FIEC and SDE-SP will closely coordinate all activities, terms of reference and acceptance of deliverables.
- 4.6 **Procurement.** Activities to be executed under Components 1 and 3 of this TC have been included in the Procurement Plan 1 (see Annex IV) and will be contracted by the Bank in accordance with Bank policies as follows: (a) AM-650 for Individual Consultants; (b) GN-2765-4 and Guidelines OP-1155-4 for Consulting Firms for services of an intellectual nature; and (c) GN-2303-28 for logistics and other related services. Activities to be executed under Component 2 of this TC have been included in the Procurement Plan 2 (see Annex IV) and, considering that FIEC is a private sector entity, procurement will be made using FIEC's procedures according to appendix IV of the Policies for the Procurement of Goods and Works financed by the IDB (GN-2349-15) and appendix IV of the Policies for the Selection and Contracting of Consultants financed by the IDB (GN-2350-15), both of May 2019. FIEC has extensive experience in the execution of similar projects to the one targeted by this TC so the risks are considered low from the point of view of procurement and financial

management. As a result, it is expected that the procurement supervision modality will be ex post. It is expected that the Bank use single-source selection for several consultancies, as set out in the attached Procurement Plans. The use of this method of selection is justified as said contracts correspond to small assignments (all which have a value of less than US\$50,000).

- 4.7 **Financial Management.** The project team has determined that an external audit of the TC will not be required, due to the funding amount, the low level of risk, and the nature and complexity of the TC. To supervise the financial management of Component 2, FIEC will present to the Bank semi-annual unaudited financial reports regarding Component 2. The first of these reports shall be presented to the Bank by June 2020.
- 4.8 **Monitoring and Evaluation.** FIEC shall present semi-annual reports to the Bank, which shall include, in relation to Component 2 and among other aspects, a description of the progress of execution, an update on implementation and financial status, and updated disbursement projections. Additionally, FIEC shall collaborate with the Bank and SDE-SP in the preparation of the TC result evaluation.
- 4.9 **Intellectual property.** The intellectual property rights of the products derived from this TC shall be owned by the Bank. In any case, the SDE-SP and FIEC will be allowed to take advantage of the products financed by this TC for non-commercial purposes, under the terms of Section AM-331 of the Bank's Administrative Manual (Procedures for the Publication of Knowledge Products).

V. Major issues

- 5.1 The risks in executing the TC and achieving its objectives are threefold: (i) unforeseen adjustments to the project design due to the volatility caused by the COVID-19 pandemic, (ii) unforeseen changes in the implementation of the HS reform associated with the TC intervention, (iii) lack of certified recognition of modular content developed by private sector. To mitigate such risks, the IDB will ensure that the design and monitoring of the preparation of the activities will be coordinated with the permanent technical staff of SDE-SP to ensure continuity in the delivery of the products. Moreover, the curriculum adjustment component of this TC will ensure that the private sector engagement method be validated by public authorities required for curricula content certification in order to establish a transparent feedback modality for relevance and quality of the developed content elements. There is also a risk in relation to the political cycle, which may cause changes to the SDE-SP team in 2023 (state elections are expected in 2022). In terms of TC execution, although 2023 is essentially a year where solely final assessments and reports are planned (execution will be advanced), and to ensure that there is a long-term legacy to the TC, close and frequent coordination mechanisms between the IDB, FIEC and the entire technical staff of the SDE-SP will be developed.

VI. Exceptions to Bank policy

- 6.1 None.

VII. Environmental and Social Strategy

- 7.1 Classification C – Due to the nature of this project, it is estimated that this TC will not have a significant negative environmental or social impact. Include [SPF](#) and [SSF](#).

Required Annexes:

[Request from the Client - BR-T1460](#)

[Results Matrix - BR-T1460](#)

[Terms of Reference - BR-T1460](#)

[Procurement Plan - BR-T1460](#)