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The obstacles to the development of secondary education in Spain, 1857-1900

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La joventut, la saviesa: tan eternes en la seva inaccessible abstracció
i tan belles, ara, ací, en la múltiple i efímera presència
d'aquests ulls distrets, d'aquests badalls —els veig—, d'aquest desinterès
amb què prenen nota del que escric a la pissarra:
ah, quan ho comprenguin algun dia,
quan en vegin la bellesa no en paraules d'algú altre
sinó d'ells, llum dels seus ulls, per fi matèria pròpia,
quina redempció d'aquests instants on ara veuen solament monotonia!

—DAVID JOU, *El professor*

Als mestres i professors de l'escola pública, que m'han fet qui sóc.
Aquesta història és també la seua.

Castellón provincial high school, circa 1900.

Agraïments

La elaboració d'una tesis doctoral implica un contacte molt estret amb un tema d'investigació que t'acompanya, dins i fora de la universitat, durant diversos anys. En aquest cas, l'elecció del tema de la tesi no va ser casual sinó fruit d'un profund convenciment de la importància de l'educació pública i, molt especialment, de l'educació secundària. Així, i en tant que la tesi doctoral suposa també la culminació del sistema educatiu, una tesi com aquesta no podia oblidar a tots els professionals que m'han acompanyat durant la meua trajectòria acadèmica i que, com dic a la dedicatòria, m'han fet qui sóc.

Voldria començar pels meus mestres al C.P. Pràctiques: Carmen Pilar Padilla, Inma Sanchis, Ildefons Hernández i José Miguel Berenguer. A l'I.E.S. San Vicente Ferrer de València em vaig fer adult i vaig prendre consciència de la importància d'una educació pública i de qualitat. Això ho de d'agrair a Juan Calatayud, Gema Calbo, Luis Marzo, Luis Doménech, Merxe Villar, Toni Arolas, María López, Isabel Real, Teresa Tormo, Jordi Belda, Celia Grande, Lluís Jiménez i Patricia Rodríguez, entre molts altres que van passar per aquelles aules.

Ja en la universitat, l'àrea d'Història i Institucions Econòmiques de la Universitat de València ha estat ma casa. Des que vaig entrar com a becari de col·laboració a l'any 2017 fins al moment d'escriure aquestes línies, els professors i professores que l'han format i la formen m'han acollit sempre com u més, sense importar la meua condició de doctorand, i amb ells he aprés més del que em podria haver imaginat abans de començar aquesta tesi. Concha, Salvador, Pablo, Antonio, Ximo Cuevas, Ximo Azagra, Alfonso, Gregori, María, David, Fran, Mª Ángeles, Teresa, Dani—gràcies a vosaltres ara sé què significa ser un bon acadèmic i, sobretot, una bona persona.

No puc oblidar-me del conjunt de membres del departament d'Anàlisi Econòmica, amb molts dels quals he après, siga economia o siga simplement de la vida a través de converses de passadís o més serioses, preguntes sobre com va la tesi, reflexions i consells de passada que no he oblidat i que, de segur, em seran molt útils en el futur. Empar Pons i Ana Huguet han estat l'equip de direcció que qualsevol haguera desitjat tindre al seu departament. Elles s'han preocupat a diari per mi, pel meu treball i m'han donat totes les facilitats possibles per a que estiguera a gust. També he d'agrair als professors d'altres departaments de la Facultat (Economia Aplicada, Estructura Econòmica, Matemàtiques per a

l'Economia i l'Empresa) i altres universitats (Universitat de Barcelona, Rutgers), tant si em van donar classe com si no, però en els que m'he pogut recolzar en diversos moments durant aquests anys. No puc pensar en un entorn acadèmic i social millor per haver fet la tesi, i per això us estaré sempre agrait.

Nel mezzo del cammin di mia tesi, la città di Siena e la sua università mi ha accolto a braccia aperte. Voglio ringraziare in modo particolare Gabriele Cappelli per la sua calorosa accoglienza e il suo impegno ad integrarmi accademicamente e socialmente in un ambiente sconosciuto. Ringrazio inoltre i membri del DEPS con cui ho potuto condividere caffè, pasti e sopratutto conversazioni che mi hanno aiutato a scoprire altri modi di fare università e mi hanno fatto sentire parte del *bel paese* che mi ha affascinato fin da piccolo.

M'agrada pensar que la successió de moments de la vida quotidiana van modelant, línia a línia, paràgraf a paràgraf, el que finalment acaba sent una tesi. El contacte amb altres doctorands (alguns ja doctors) m'ha enriquit personalment i acadèmica com mai haguera pogut imaginar, i ha fet que aquesta tesi siga molt millor que si no haguera compartit amb ells viatges, congressos, dinars, sopars, cafés, sessions de pissarra analitzant una idea o simplement passejos al voltant de la Facultat quan estar al despatx resultava ja asfixiant. És per tot això que he d'agrair a Guillermo Antuña, Ana Mar Bueno, Miguel Borrero, Carolina Calatayud, Josep Dols, Guillermo Esteban, Víctor Fernández, Pablo Fernández, María José Fuentes, Alejandro Nieto i Adrián Palacios. No puedo olvidarme de quien se ha convertido en uno de mis mejores amigos y, a la vez, en un referente para mí. Iván Vicente ha sido la primera persona a quien llamar cuando he recibido una noticia y el primer despacho al que ir cuando no he sabido enfrentarme a un problema. Él me ha escuchado, me ha ayudado, me ha calmado, me ha aconsejado y me ha animado. No concibo un futuro en esta profesión sin poder compartirlo con él.

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un mestre millor.

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En lo personal, no han sido menos las influencias positivas que he recibido para poder llegar hasta aquí. Alberto, Laura, Jorge y Marcela se han convertido en mi núcleo familiar durante los últimos meses de esta tesis. Consciente o inconscientemente, ellos me han proporcionado el ambiente que necesitaba en esta etapa de mi vida, con las suficientes dosis de comedia, improvisación y locura necesarios precisamente para no volverme loco. Me reconforta saber que Aladrers quedará para siempre como la casa en la que escribí esta tesis.

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Javier V. conoce los caminos académicos y personales que han llevado a esta tesis probablemente mejor de lo que tanto él como yo hubiéramos deseado. A pesar de todo lo que hemos pasado, sigo estando convencido de que no habría llegado hasta aquí sin su bonhomía y su optimismo, pero tampoco sin su constancia, su paciencia y el apoyo incondicional y diario que me ha brindado durante los años que nos separan de aquel primer encuentro en un aula (de instituto, claro) un frío lunes de enero ya lejano. Los días son menos fríos desde entonces y eso es algo que nunca podré agradecerle lo suficiente.

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Pero nada de lo anterior me habría llevado hasta aquí si no hubiera sido por mis padres y mi hermana. A mi padre, José Ramón, debo agradecerle su forma de enseñar haciendo y sus absolutamente siempre acertados consejos, en una clarividencia que nunca dejará de sorprenderme. A mi madre, Maribel, por ser faro en la oscuridad y demostrarme con su ejemplo constante que el amor por un hijo no se agota y todo lo puede. A mi hermana Mar quiero agradecerle su apoyo, su admiración y la constante alegría que contagia. Debe saber lo mucho que admiro su forma de ser y que estoy impaciente por vivir todas las aventuras que el futuro nos depara juntos.

Ellos tres han sido, como decía Vicente Aleixandre, "día, noche, ponientes, madrugadas, espacios, ondas nuevas, antiguas, fugitivas, perpetuas, mar o tierra, navío, lecho, pluma, cristal, metal, música, labio, silencio, vegetal, mundo, quietud, su forma". A su forma me han enseñado a no dejar de intentar nada, a no tener miedo —*Be not afeard*, como advertía Caliban a Stephano en *The Tempest*— y con ello darme cuenta de que la vida, como la isla de Próspero, está llena de suaves melodías que cautivan y no lastiman y, por tanto, que nunca hay que dejar de hacer lo que uno cree que vale la pena. Creo que no es posible recibir un legado mejor y por ello me siento tremendamente afortunado de teneros.

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El Carme (València), gener de 2023

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(In fulfillment of article 7.2 of the Universitat de València regulation for assessment and deposit of doctoral theses; ACGUV 29-XI-2011; modified ACGUV 28-II-2012; modified in ACGUV 29-X-2013)

El capital humà és un dels pilars del creixement i el desenvolupament econòmic (Romer, 1986, 1990; Lucas, 1988). Tanmateix, l'anàlisi econòmica del capital humà presenta un gran nombre de dificultats, especialment perquè els mecanismes que permeten l'acumulació d'aquest tipus de capital, les habilitats i els coneixements, són intrínsecs a la naturalesa humana i, en general, resulten difícils de observar. Però, a més, la formació de capital humà es produeix a partir de l'aprenentatge formal i informal i passa al llarg de la vida, per la qual cosa el seu mesurament suposa tot un desafiament (Goldin, 2016). Tractant de superar els inconvenients que l'anàlisi del capital humà planteja, s'ha proposat la diferenciació del capital humà en tipus o nivells per tal de veure'n els efectes diferencials sobre el desenvolupament, argumentant que només el coneixement útil —és a dir, el que pot ser aplicat a la transformació de la realitat— és el que està realment implicat en els processos de creixement econòmic (Mokyr, 2005, 2017). Des d'aquesta perspectiva, sembla assenyat pensar que l'acumulació de capital humà provocada per la lectoescriptura no serà la mateixa que la provocada per un coneixement avançat i molt específic sobre una disciplina concreta. Fugint de tots dos extrems, recentment s'ha suggerit que el capital humà intermedi, entès com aquelles "habilitats intermèdies formades per la difusió de coneixements generals bàsics que van més enllà de les habilitats bàsiques de lectoescriptura i aritmètica" (Diebolt et al., 2021, p. 169) també poden ser rellevants en els processos d'industrialització, atès el seu caràcter avançat però lo suficientment genèric

com per adaptar-se a les necessitats canviants de les indústries naixents.

En aquest sentit, l'experiència dels Estats Units és paradigmàtica. Segons defensen Goldin and Katz (1998, 2008), una vegada que les complementarietats entre capital, tecnologia i habilitats es van fer evidents durant la Segona Revolució Industrial, va tenir lloc al país una autèntica "cursa entre educació i tecnologia" en què el coneixement útil assolit a les etapes intermèdies del sistema educatiu va alimentar la creixent indústria del país fins a convertir-la en líder mundial al començament del segle XX. Des d'aleshores, part del lideratge nord-americà s'ha atribuït al sorgiment de l'escola secundària Goldin and Katz (1999, 2008), basat per part seva en la difusió profusa de les anomenades *common schools* (Go and Lindert, 2010). Curiosament, la construcció i el finançament d'escoles secundàries no només va estar determinada pels ingressos i la riquesa dels que les van promoure, sinó també pels rendiments esperats que aquesta educació podria proporcionar als seus estudiants en el seu futur laboral, cosa que constitueix un exemple significatiu de la relació estreta que existia institucions educatives i activitat econòmica a nivell local i regional. Malhauradament, l'expansió de l'educació post-elemental als Estats Units contrasta significativament amb el lent progrés observat a Europa.

En el cas d'Espanya, s'ha argumentat que la manca de mecanismes que permeteren l'acumulació de capital humà va limitar severament el creixement econòmic i la modernització posterior del país (Núñez, 1992, 2005; Prados de la Escosura and Rosés, 2010; Carreras and Tafunell, 2021). Si bé l'explicació central descansa en la baixa demanda social per l'educació i en la inacció per part de l'Estat a l'hora d'establir una xarxa pública de centres escolar, especialment en el nivel primari, hi ha pocs estudis que hagen profunditzat en la qüestió des d'una perspectiva a nivell nacional. Utilitzant xifres d'alfabetització a nivell provincial i municipal, respectivament, Núñez (1992) i Beltrán-Tapia et al. (2019) han demostrat que existien marcades disparitats entre les províncies i fins i tot dins d'elles, cosa que pot explicar, almenys en part, les diferents trajectòries de desenvolupament regional. No obstant això, i tret d'alguns enfocaments amplis sobre el segon ensenyament (Viñao Frago, 1982; Sanz Díaz, 1985; Díaz de la Guardia Bueno,

1988), no hi ha estudis a nivell nacional sobre els orígens i les primeres etapes de l'educació secundària a Espanya que continguin una exposició sistemàtica del nombre d'alumnes, el nombre de centres públics i privats que impartien aquests ensenyaments i, en definitiva, una anàlisi dels efectes potencials de l'extensió de l'etapa sobre les trajectòries de desenvolupament econòmic i sobre la desigualtat regional a mitjà i llarg termini.

Tenint en compte aquest context, aquesta tesi doctoral té com a objectiu aportar una primera aproximacio a la pregunta de què no va funcionar a Espanya perquè l'educació secundària no es generalitzara com sí que ho va fer en altres països, on a més va exercir un paper important en els processos de desenvolupament econòmic? La resposta òbvia a aquesta pregunta té a veure amb les baixes taxes d'alfabetització que tenia Espanya al segle XIX i, per tant, la reduïda capacitat del sistema per a generar alumnes candidats a accedir i superar amb èxit ulteriors etapes educatives. Tot i això, considerem que els aspectes socials i econòmics intrínsecs a la pregunta en qüestió són prou variats i complexos per suggerir respostes matisades que vagen més enllà de l'argument de l'alfabetització. Per això, els diferents capítols d'aquesta tesi analitzen diversos aspectes de la secundària a l'Espanya de la segona meitat del segle XIX, tant des del punt de vista de l'oferta com des del de la demanda, amb la finalitat de fer llum sobre les limitacions a les quals va haver d'enfrontar-se l'etapa educativa durant els primers anys del seu desenvolupament.

Així, aquesta tesi doctoral pretén aportar llum sobre les primeres fases de desenvolupament de l'educació secundària en Espanya, des de l'aprovació de la Llei Moyano en 1857 fins al començament del segle XX. Per a fer-ho, aquesta tesi té com a objectius específics oferir respostes a dos interrogants diferenciats però que tanmateix guarden una íntima relació. En primer lloc, es tracta d'esbrinar com la educació secundària es va desenvolupar en termes materials al llarg de totes les províncies espanyoles durant aquest període, reconstruint per a això el nombre d'alumnes que cursaven l'educació secundària en les seues diverses modalitats, el nombre d'escoles —tant públiques com privades— en les quals es podien cursar els estudis, així com el nombre de professors que exercien el seu magisteri

en les diferents disciplines que comprenien els plans d'estudis. En segon lloc, i una vegada analitzada la evolució, tant des d'un punt de vista agregat com des d'una perspectiva territorial, de les variables educatives mencionades, tractem d'analitzar les causes educatives, econòmiques i socials que van tindre una major rellevància a l'hora de determinar el particular desenvolupament del sistema secundari espanyol durant la segona meitat del segle.

En particular, ens centrem en analitzar els dos fenòmens que, sota el nostre punt de vista, van influir de forma més determinant en l'evolució de la secundària espanyola al segle XIX. El primer d'ells, des del punt de vista de l'oferta educativa, està relacionat amb el nul creixement de la xarxa pública d'instituts des de l'aprovació de la Llei Moyano i el consegüent increment progressiu del pes relatiu de l'escola privada, tant en termes d'escoles com d'alumnes matriculats, a partir de la dècada de 1880. Deixant de banda les causes que van poder influir en la incapacitat dels poders públics per a bastir una xarxa pública descentralitzada en un context d'alta inestabilitat política i mancances financeres, per primera vegada en la literatura posem el focus en el paper dels centres privats, estudiant les seues estratègies d'implantació territorial com a resposta a l'anquilosament del sistema públic. El segon aspecte està relacionat amb la demanda educativa i té a veure amb els obstacles als quals s'havien d'enfrontar els alumnes a l'hora d'accedir a la etapa educativa secundària. Tenint en compte la particular estructura institucional de les institucions relacionades amb la educació i la cultura en el context de espanyol de l'època, tractem de demostrar que la immensa majoria de la població espanyola havia d'enfrontar-se a uns costos socials, familiars i econòmics molt elevats per tal de poder afrontar els estudis secundaris. Aquesta és una hipòtesi que la literatura no havia considerat fins ara i que podria contribuir a explicar les baixes taxes de matrícula en educació secundària durant la segona meitat del segle XIX.

Així, la primera part de la tesi té com a objectiu reconstruir estadísticament un conjunt de variables educatives relacionades amb l'educació secundària per al conjunt de les províncies d'Espanya entre els anys 1860 i 1900. Per això, s'han reconstruït sèries harmonitzades als nivells provincial i nacional per a les següents

variables: nombre d'estudiants d'educació secundària; taxes brutes de matrícula en educació secundària, per a tots dos gèneres i només per a homes; i el nombre total d'escoles secundàries públiques i privades. A més, també s'ha reconstruït el nombre de catedràtics en actiu en tots els instituts públics durant el període d'estudi.

Pel que fa al càlcul de les variables esmentades, convé fer alguns esments metodològics. Per una banda, cal tindre en compte que a l'època existien tres possibles modalitats d'estudi. La primera, denominada *oficial*, fa referència a tots aquells estudiants que assistien presencialment a classes en l'institut. La segona, generalment denominada *col·legiada* o *privada col·legiada*, fa referència a tots aquells estudiants que assistien presencialment a classes en centres privats autoritzats pel govern. Per últim trobem la modalitat *lliure*, que fa referència a tots aquells estudiants que no assistien a classes sinó que es preparaven la matèria pel seu compte, o assistits per preceptors privats, i només assistien a l'institut per tal de fer els exàmens corresponents. Per altra banda, cal indicar que la taxa bruta de matriculació (en anglès GER, sigles de gross enrollment rate) en una etapa educativa es defineix com la ràtio entre el nombre d'estudiants que efectivament cursen l'etapa i el total de població en edat teòrica de cursar la etapa. Un índex de 1, per tant, indicaria que tots els infants en edat teòrica de cursar una etapa educativa es troben efectivament cursant-la. Com és evident, la utilitat d'una mesura d'aquestes característiques depèn d'una definició acurada del denominador que permeta obtindre conclusions útils sobre l'efectivitat del sistema educatiu en el seu context social. En el cas de la educació secundària a la Espanya de segona meitat del segle XIX, i tenint en compte les característiques del perfil de l'alumnat, les estimacions s'han realitzat assumint una edat teòrica per a cursar els estudis secundaris d'entre 10 i 20 anys.

L'evolució en el nombre d'estudiants de secundària, tant en xifres absolutes com en taxa bruta de matrícula, discorre de manera pràcticament paral·lela durant tota la segona meitat del segle. Mentre que el nombre absolut d'estudiants creix molt lentament entre 1860 i 1890, la taxa bruta de matrícula es manté pràcticament constant i per baix de l'1% durant la totalitat del segle XIX. La com-

binació d'ambdues observacions suggereix un fenomen de lleuger creixement poblacional en la franja d'edat teòrica de cursar estudis secundaris durant les darreres dècades del segle que, tanmateix, no va anar acompanyat d'un augment de les matriculacions. El capítol 4 d'aquesta tesi apunta a una de les possibles causes que podrien estar darrere d'aquest fenomen.

També és important observar la distribució del nombre total d'estudiants en les diferents modalitats d'ensenyament referides anteriorment (oficial, privada col·legiada i lliure) en tant que permeten apreciar les dinàmiques en la relació entre escola pública i escola privada durant el període d'estudi. Així, durant les dècades de 1860 i 1870 el predomini de l'educació pública davant de les modalitats privada i lliure era clar, ja que més del 60% dels estudiants cursaven l'etapa en instituts públics. Aquesta conjuntura resulta fàcilment explicable per la novetat que va suposar la implantació formal de l'etapa educativa amb el *Plan Pidal* al 1845 i la seua posterior consolidació amb la *Llei Moyano* al 1857. Donat que es tractava d'una etapa educativa sense antecedents directes en l'àmbit nacional, la seua presència al sistema durant els anys centrals del segle es va articular gairebé exclusivament a través dels instituts públics i no tant dels centres privats, el nombre total dels quals encara era molt limitat. En l'any 1880 trobem un punt d'inflexió que ens permet parlar d'una nova etapa que va tenir lloc entre el 1880 i el 1900. Aquesta etapa es va caracteritzar per l'auge de la matrícula a les escoles privades i el relatiu declivi de les escoles públiques, un fet que ens permet confirmar la hipòtesi sobre l'intens creixement de la escola privada que ja havia apuntat (Viñao Frago, 1982) amb dades estadístiques més fragmentàries.

Pel que fa a l'estudi dels docents que exercien el seu magisteri en aquesta etapa, el nostre treball s'ha centrat en la reconstrucció del cos de catedràtics de secundària. Tot i no ser l'única categoria docent que existia dins l'etapa educativa, es tractava dels professionals que en la pràctica exercien el lideratge pedagògic i, a més, ostentaven els llocs directius i de representació dels instituts (Cuesta Fernández and Mainer Baqué, 2015). Així, hem construït una base de dades unificada que inclou informació personal dels catedràtics de segon ensenyament en actiu des del 1861 fins al 1885 que ens permet obtindre una

panoràmica interessant sobre el cos docent, el seu funcionament i l'efecte de la seua existència sobre la etapa educativa a la qual estava destinada a servir. El principal objectiu és brindar una perspectiva agregada del sistema d'educació secundària del país a través dels seus docents, la ubicació geogràfica i les matèries que imparteixen amb un doble objectiu. D'una banda, conèixer com la consolidació d'un cos de funcionaris de primer nivell creat durant el desenvolupament i l'expansió de l'estat liberal espanyol al segle XIX, amb els avantatges que això pot portar a l'estudi dels processos de construcció estatal i el seu desplegament administratiu. D'altra banda, aprofundir en l'estudi de la presència de determinades disciplines científiques al territori, a través de les destinacions professionals dels catedràtics als diferents instituts del país.

Així, sembla que el sistema de promoció per seccions va ser molt eficaç en classificar els catedràtics segons la seva antiguitat i mèrits, especialment a mesura que avança el segle i es consolida el sistema. Des d'un punt de vista espacial, la distribució de docents evidencia la consolidació del sistema d'educació secundària en el sentit que assignatures bàsiques com Llatí i Castellà o Matemàtiques arriben a un nombre relativament uniforme de docents entre províncies a mesura que avança el segle. Tot i això, hi ha dos patrons geogràfics rellevants. D'una banda, quant al percentatge de professors sobre el total nacional, observem com les províncies perifèriques juntament amb Madrid són les que acaparen les xifres més altes, tant a mitjans com a finals de segle. D'altra banda, les províncies amb més docents solen ser aquelles que tenien més d'un institut, cosa que indica que no hi havia competència per assignatures entre instituts d'una mateixa província. En definitiva, la distribució territorial dels catedràtics de segon ensenyament es va consolidar seguint un patró en què les regions perifèriques tenien més protagonisme, d'acord amb la seva rellevància demogràfica i econòmica.

A partir d'aquest punt, la tesi s'encarrega de plantejar i validar algunes hipòtesis que permeten explicar les dinàmiques en termes de taxes de matrícula, nombre d'estudiants i nombre d'escoles que s'han descrit en els dos primers capítols de la tesi. Partint del fet, ja comentat anteriorment, de que la xarxa pública d'instituts a penes va créixer durant els anys que separen l'aprovació

de la *Llei Moyano* en 1857 i el canvi de segle, tractem d'oferir possibles explicacions al fet de que tant el nombre absolut d'alumnes com la taxa de matrícula es mantingueren pràcticament constants.

La primera de les hipòtesis té a veure amb la possible dificultat que podia suposar per a la majoria d'estudiants l'accés als instituts públics o, més específicament si l'accés a l'educació secundària durant aquest període va ser una font de desigualtat d'oportunitats per raons geogràfiques, donat que la immensa majoria dels instituts públics estaven localitzats en les capitals de província. Donat que durant el segle XIX la població espanyola es concentrava majoritàriament fora de les capitals de província, plantege la hipòtesi de que l'estructura institucional del sistema d'educació secundària espanyol al segle XIX va imposar severs costos d'accés a la majoria dels estudiants i, per tant, va impedir que la etapa educativa secundària puguera estendre's i arribar a la majoria de la població en igualtat de condicions. Per a sostindre el meu argument, introduïsc el concepte d'àrea allunyada del coneixement (en anglès, *away-from-knowledge (AFK) areas*) per definir àmpliament aquells llocs que es trobaven geogràficament i socialment aïllats del coneixement i l'educació i, per tant, eren una font de desigualtat de oportunitats en l'accés a l'educació per als qui en ells hi van créixer. En aquest sentit, la pregunta que es vol analitzar és com va influir l'estructura de la xarxa d'educació secundària en la decisió dels estudiants de continuar els estudis. Per això, es planteja la hipòtesi que la quantitat d'instituts públics i la manera com es van distribuir al territori va impedir que una part important de la població poguera accedir a aquesta etapa educativa o, almenys, en va disminuir les probabilitats d'èxit.

Per testar aquesta hipòtesi, es proposa una nova mesura dels costos acadèmics, econòmics, socials i familiars als quals els estudiants s'havien d'enfrontar a la hora de cursar estudis secundaris. Utilitzant resultats previs provinents de la literatura històrico-educativa, argumente que la edat de graduació de Batxillerat pot ser una bona mesura d'aquests costos. Una vegada establerta la potencial utilitat de l'edat de graduació per a medir els costos personals als quals s'havien d'enfrontar els estudiants, utilitze una font històrica fins ara

inexplorada que conté informació de l'edat de graduació i el municipi d'origen de tots els estudiants que van obtindre el títol de Batxillerat durant el curs acadèmic 1877-1878. Assumint que la dimensió del municipi d'origen de l'estudiant en el moment del seu naixement és un bon indicador del seu dinamisme cultural i el seu grau d'alllunyament del coneixement, utilitze una regressió per mínims quadrats ordinaris amb observacions a nivell individu per tal d'establir quina era la relació entre haver nascut en un municipi i l'edat de graduació. A més, per tal d'aportar robustesa als resultats, complementa aquesta estimació amb una regressió per quantils, per tal de veure els efectes diferencials del municipi d'origen en estudiants que es van graduar al llarg de la distribució d'edats i que, presumiblement, van haver-se d'enfrontar a diferents costos per a estudiar.

Els resultats mostren que els estudiants de contextos no urbans havien d'enfrontar-se a més costos per estudiar secundària que els provinents de les ciutats. A més, la mida d'aquest efecte és cada vegada més gran per a aquells estudiants que es van graduar a una edat més gran, és a dir, aquells que presumiblement van haver d'enfrontar-se a més costos familiars, socials i econòmics per poder cursar el segon ensenyament.

Una vegada establerta la possibilitat de la existència de zones allunyades del coneixement, el següent capítol de la tesi trata d'explorar quin va ser l'efecte de la incapacitat estatal per a crear nous centres públics en el desenvolupament de la xarxa educativa privada. Per a fer-ho, es documenten els orígens i l'evolució de les escoles de secundària privades durant la segona meitat del segle XIX. Específicament, s'avalua empíricament la distribució espacial de les escoles privades amb una atenció especial a l'impacte de diferents variables socioeconòmiques en la decisió dels empresaris i les congregacions religioses d'obrir una nova escola secundària privada. Això és particularment rellevant, atesa l'explosió en el nombre d'escoles privades durant els anys objecte d'estudi i el manteniment pràcticament constant del nombre de centres públics.

La creació dels nous centres privats va seguir un patró espacial molt lligat a la demanda, ja que van tendir a ubicar-se en municipis amb més taxes de creixement demogràfic en dècades anteriors, amb més taxes de alfabetització, o seus

d'institucions administratives, com ara els municipis caps de partit judicial. Resulta difícil exagerar la importància d'aquest fet, ja que a la pràctica va implicar la reubicació de l'educació secundària i el seu apropament a la major part de la població, que majoritàriament continuava ubicada a les zones. Amb el canvi de segle, però, l'enduriment dels requisits que havien de complir els centres privats va provocar la desaparició de molts i, amb això, la disminució del nombre d'alumnes matriculats. Tot i això, l'expansió de l'ensenyament privat havia suposat una extensió de l'etapa educativa a tot el territori i, en conseqüència, una certa popularització i conscienciació del seu potencial interès i utilitat, com demostra l'augment sostingut del nombre d'alumnes a partir de 1900. En aquest context, i durant tot el primer terç del segle XX, la modalitat d'ensenyament lliure es va configurar com l'opció natural per a una gran majoria d'estudiants que, tot i voler cursar estudis de secundària, tenien dificultats per matricular-se en modalitat oficial als instituts públics.

Com es podia esperar, la creació de noves escoles privades no va ser un procés aleatori. En línia amb el moviment de l'escola secundària, la demanda en va ser en gran part responsable, però el cas espanyol ofereix una comprensió més gran, especialment pel que fa a la interacció entre les forces locals i els agents privats. La creixent presència de les escoles catòliques va revifar la qüestió religiosa, cosa que al mateix temps va conduir a una conflictiva secularització que va marcar els inicis del segle XX (de la Cueva and Montero, 2007). Les iniciatives privades es van adreçar a llocs grans, alfabetitzats i econòmicament més dinàmics. Com que la xarxa d'institut es va mantenir pràcticament sense canvis durant tot el període d'estudi, sembla que l'empresa privada va respondre a les demandes locals i va omplir els buits que deixava la xarxa pública. Així, l'escola secundària privada tampoc no es va estendre de manera universal per tot el territori, i va persistir en el problema de la mala accessibilitat. Com a resultat, aquells que vivien en llocs sense accés directe i que volien seguir una educació postelemental havien de mudar-se o optar per classes particulars, a través de preceptors privats o escoles informals.

El paper del capital humà intermedi ha estat fonamental en determinats con-

textos històrics de canvi estructural i desenvolupament econòmic. Aquesta tesi doctoral té com a objectiu principal analitzar el rol del capital humà intermedi en la difícil industrialització espanyola entre els segles XIX i XX. En concret, la tesi intenta aportar evidència històrica que expliqui les causes del fracàs del segon ensenyament a Espanya, oferint així una visió global que complementi i matisi la tradicional hipòtesi de la baixa alfabetització com a causa fonamental. Si bé es van prendre decisions de política educativa que reflecteixen un clar interès per adaptar l'etapa educativa a les demandes socials ia les necessitats de formació que imposava la transformació econòmica gradual, en general la reduïda extensió de la xarxa pública i els patrons de desenvolupament de la xarxa privada van ser factors que van impedir accedir a l'etapa educativa de la major part de la societat.

En resum, aquesta tesi suposa dues aportacions a la literatura. En primer lloc, duu a terme la primera reconstrucció del nombre d'alumnes, el nombre de catedràtics i el nombre d'escoles públiques i privades per a totes les províncies espanyoles durant la segona meitat del segle XIX i primer terç del XX. En segon lloc ofereix, partint de les reconstruccions estadístiques elaborades, dues possibles explicacions del fracàs del sistema educatiu secundari.

Chapter 1

Introduction

The reason for the failure of Spanish industrialization is a topic that gives rise to enormous debate. Since the pioneering work of (Nadal, 1975), where various possible complementary explanations for this failure are offered, there have been several attempts to delve into the causes of the Spanish particularity with respect to the rest of Europe. Given the growing importance of human capital within theories of economic growth, the characteristics of Spanish human capital during the 18^{th} and 19^{th} centuries soon emerged as an important factor to take into account to obtain satisfactory explanations of the phenomenon. However, Nadal (1996) himself posed a hypothesis, later empirically tested by (Rosés, 1998), warning that the variable traditionally used to measure the accumulation of human capital in historical contexts, literacy, might not be useful in the Spanish context. In his opinion, this is so because the first Catalan industrialization required a series of technical skills that were not so much related to literacy, but rather were usually acquired in the workplace.

This interpretation would be consistent with the results obtained by the historical literature in the analysis of literacy rates in the Spanish provinces. The seminal work by (Núñez, 1992) allowed for the first time to obtain a complete picture of the evolution of literacy in the Spanish provinces, evidencing clear regional asymmetries that persisted well into the 20^{th} century. The work of (Beltrán-Tapia et al., 2019) allowed us to delve into the analysis of these differences by provid-

ing literacy figures at the municipal level. Paradoxically, however, such estimates show that episodes of industrial development did not take place in the most literate regions, instead occurring in areas with average literacy rates. Although this is no more than a simple observation, the truth is that such a phenomenon would match Nadal's hypothesis.

In order to delve into this issue, and test whether other types of education were indeed decisive in the process of Spanish industrialization or not, it is convenient to analyze the situation of other educational levels beyond primary education. Assuming, following Nadal's proposal, that a type of intermediate human capital could be relevant for economic growth, it seems immediate to think about the study of secondary education, which within the liberal approaches that inspired the educational reforms of the 19th century was the educational stage that should follow primary education in order to train liberal citizens. However, the small size that secondary education reached within the framework of the Spanish 19th-century educational system has prevented such analyses from being carried out. Thus, at this point it is worth considering two fundamental questions: What was the secondary education system like during the second half of the 19th century? What factors could have hindered its growth and social diffusion?

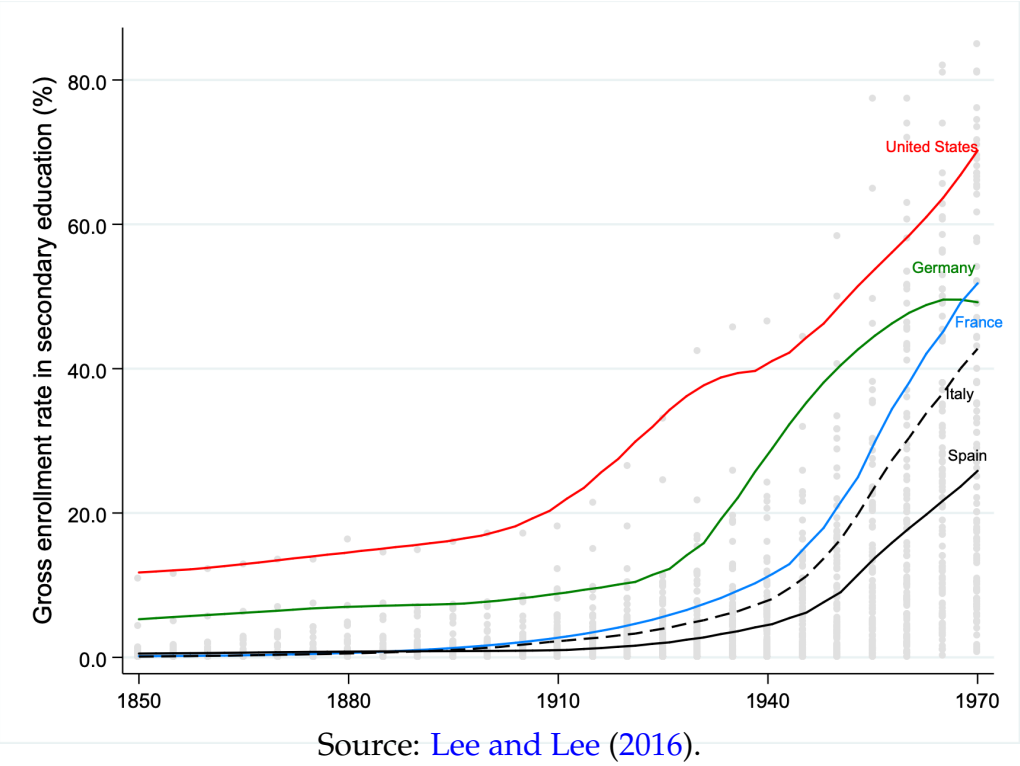
If we consider gross enrollment rates to be a good approximation of the effectiveness of an educational system, the comparison of Spain with other countries may give us a first image of the relative situation of secondary education within the framework of Spanish society. The enrollment rate in secondary education in Spain did not surpass the 1% barrier until 1910 (see chapter 2 for a discussion of the previous estimates and the new ones elaborated in this thesis), which places Spain in line with other Mediterranean countries, such as Portugal, Greece, Italy or France (the latter two, however, having suffered a notable increase during the last years of the century) but far from the figures of other countries such as Canada (around 4% in 1900), Norway (around 6% in 1900), Germany, Austria or Switzerland (which were around 7% in 1900) and, of course, the United States of America, which in 1900 was already close to a 20% enrollment rate (Lee and Lee, 2016).

It may certainly be argued that the relative differences in enrollment rates do not appear to be large during this period. However, we must bear in mind that the relative position with which each of the countries will end the 19th century in terms of enrollment will largely determine their performance during the 20th century, the period during which the greatest episodes of growth of secondary education enrollment rates are observed, both in absolute and relative terms. Thus, for example, of the countries reviewed above and relying again on the estimates by Lee and Lee (2016), most of those that did not exceed 5% in 1900 will reach 20% in 1950 and practically 100% in 2000. As noteworthy examples, it is worth highlighting the cases of the United Kingdom and the United States, which in 1950 already reached an enrollment rate of around 30%; or Germany, which in the same year was already around 50%. Spain, however, will remain unaffected by the intense growth in enrollment experienced by leading countries after 1910, reaching an enrollment rate of only 7% in 1950, a figure that places its performance even below that of countries that had previously been at their level, like France or Italy, which crossed the equator of the 20th century with figures between 10 and 20%, as can be seen in Figure 1.1.

But why did Spain find itself in such an anomalous situation compared to most Western countries? Bearing in mind that education in Spain was definitively established as early as 1857, what internal factors caused the number of students to barely grow until well into the 20th century? These are some of the questions that we intend to answer in this thesis.

In the following pages we offer a review of the literature on which we relied to build this work. First, we review the background on the relationship between human capital, development and economic growth, as well as the literature that focuses on valuing the institutional importance of schooling to guarantee an accumulation of human capital that contributes to growth and the obstacles that may be found. Once the relationship between economic growth and educational systems at different levels has been established, we proceed to assess the treatment that the literature has given to secondary education in its relationship with the accumulation of human capital. Subsequently, and focusing on the Spanish

Figure 1.1. Evolution of the secondary education gross enrollment rates in a sample of countries, 1850-1970.



Source: Lee and Lee (2016).

context, we offer an overview of the background of secondary education since the 18th century until its consolidation with the *Ley Moyano* (1857), and then review the historical literature that has been dedicated to studying the secondary educational stage during the second half of the 19th century. Finally, we state the main objectives of the thesis and describe how we intend to address them in its different parts.

1.1 Human capital, economic growth and development

(Schultz, 1961) is usually credited with coining the concept of "human capital" to refer to all those aspects related to the quality of life that influence the economic productivity of individuals, including their skills and, by extension, the education received. A few years earlier, (Mincer, 1958) had demonstrated the relationship between individual skills and income distribution, postulating that part of

the differences in individual income is due to different levels of investment in training, that is, an aspect of human capital. In later work, (Mincer, 1962, 1974) succeeded in demonstrating the relationship between net investment in human capital—usually measured through years of schooling—with individual lifetime earnings. These works suffered from being excessively focused on the individual and, despite their undoubted usefulness, they were not capable of carrying out a consistent explanation of the mechanisms through which human capital could affect economic growth. It would not be until the 1980s when the first endogenous growth models appeared, supporting through theoretical models the central role of human capital, knowledge and innovation in economic growth (Romer, 1986, 1987, 1990; Lucas, 1988). However, the empirical testing of these models presented difficulties like those encountered by mincerian microeconomists a few decades earlier—the proper measurement of what we understand by human capital.

Indeed, all those elements that contribute to the so-called accumulation of human capital, such as knowledge, skills or intelligence, are mostly intangible, the objective measurement of which is very complicated, if not outright impossible. Faced with this difficulty, there have been many attempts to empirically measure the relationship between economic growth and human capital, using different variables to try to deepen in this relationship. Following the mincerian tradition, some works have tried to relate economic growth to measures of educational attention, such as enrollment rates at different levels of education (Mankiw et al., 1992; Barro, 1991; Gennaioli et al., 2013) or the number of years of schooling, either directly or reconstructed through census and enrollment data (Barro and Lee, 1993, 1996, 2001, 2013). However, the use of such estimates in international comparisons aimed at empirically contrasting the theoretical postulates presents several problems. The most important of these, as Cohen and Soto (2007) point out, is the fallacy of the catch-up effect, that is, that countries that experience higher growth rates are those that started at lower levels, as was the case of African countries. Beyond this problem, and as Krueger and Lindahl (2001) or de la Fuente and Doménech (2006) soon pointed out, the sources from which international data are obtained sometimes present problems due to

their great variability and little consistency. Arguing that mere enrollment in an educational stage is not a faithful approximation to the hypothetical accumulation of human capital that may be taking place, other researchers have chosen to use measures related to educational quality. Hanushek and Kimko (2000) were the first to relate a measure of educational achievement to economic growth in a sample of countries. Going further along this line, Hanushek and Woessmann (2008, 2012) argued and demonstrated the usefulness of using cognitive skills as a measure when investigating their effects on individual earnings and, in general, on economic growth.

Be as it may, what does seem clear is that schooling plays a fundamental role in the transmission of skills and knowledge, shapes our personal and social development (Bowles and Gintis, 1976; Oreopoulos and Salvanes, 2011) and affects social cohesion and nation-building (Alesina et al., 2021). But even through the clearly defined channels to knowledge that are modern educational systems, access to knowledge and the eventual accumulation of human capital derived from it is still subject to a large number of contingencies that may, depending on the case, make it easier or more difficult for a person to actually be able to do it. The most immediate have to do with the effects of the students' ability to finance their studies on human capital accumulation (Galor and Zeira, 1993; Bénabou, 1996; de Gregorio, 1996), even if the education system is public (Ferreira, 2001).

However, other factors beyond credit constraints can influence such decision. Specifically, circumstances out of the individual's control and for which he cannot be deemed responsible, such as the sociocultural context of origin, may be particularly important in determining the decision to invest in human capital (Mejía and St-Pierre, 2008). In this regard, the lack of adequate information and encouragement on low-income students has been found to have a negative effect on their ability to access selective schools (Hoxby and Avery, 2013). Also, neighborhood peer-effects have recently been found to exert a positive influence on the decision to attend and complete university education (Barrios-Fernández, 2022). Undoubtedly, other conditions such as proximity to educational centers or the quality of education received, are also crucial in this decision. The concurrence

of these factors gives rise to inequality of opportunity, that is, when contextual elements "attributable to luck" (Roemer and Trannoy, 2016, p. 1289) significantly alter an individual's economic present and future situation. It has been shown that inequality of opportunity is negatively correlated with economic growth in developed countries (Checchi and Peragine, 2010; Marrero and Rodríguez, 2013) but this relationship is even more intense in developing countries (Ferreira and Gignoux, 2011; Brunori et al., 2019), as inequality of opportunity contributes to income inequality in a larger degree.

1.2 The economic history of (secondary) education

Now looking at History, the literature has shown contradictory results about the need of a skilled mass to guarantee the success of the First Industrial Revolution. Some authors defend that literacy had little importance in early industrialization processes, given that the new production systems that came with the Industrial Revolution increased the relative demand for unskilled workers (Allen, 2003; McCloskey, 2010), in what has been called the "deskilling hypothesis" (de Pleijt and Weisdorf, 2017). Others, however, have argued that skills were a fundamental factor in making structural change effective, since its application to the economy relied heavily in the understanding, treatment, and application of relatively advanced knowledge. (**?**Mokyr and Voth, 2009; **?**; **?**). Attempts to resolve this issue have been numerous and have been approached from many different points of view.

In line with the first of the hypotheses, (Nicholas and Nicholas, 1992; Mitch, 1993, 1999) show that literacy rates hardly increased in England between the 18th and 19th centuries. For his part, and in this case estimating the gap between the wages of skilled and unskilled workers, van Zanden (2009) observes that the skill premium —at least for the construction industry— barely changed in Europe as a whole, and especially in the north, during the Modern Age and up to 1900. Closer to the second of the hypotheses are the works of van der Beek (2014) and Kelly et al. (2014), which demonstrate the importance of new knowledge of the Indus-

trial Revolution for the progress of industrialization in England. The importance of knowledge has also been demonstrated in the case of French industrialization, either directly (Squicciarini and Voigtländer, 2015) or through contact with English knowledge (Nuvolari et al., 2023).

In light of such dilemma, Joel Mokyr suggested the concept of "useful knowledge" to refer to the kind of knowledge about natural phenomena that allows the manipulation of nature through "artifacts, materials, energy and living beings" (Mokyr, 2004, p. 3) for a material benefit. In the context of the industrialization processes that gave rise to the demographical transition and modern economic growth during the 18th and 19th centuries, the importance of such type of knowledge is fundamental. From this perspective, it is easy to see how the effects on economic activity will be different depending on whether human capital consists just on literacy or it involves specialized knowledge in a particular field. In this regard, **?** is the first to propose distinguishing between the different types of training included in the broad definition of human capital. Under the assumption that advanced and specific knowledge about a particular subject must have different effects on technological change than mere literacy, some authors have tried to differentiate between the effects of average and advanced knowledge (i.e. *upper-tail knowledge*) in industrialization processes, both for the case of Great Britain (Mokyr and Voth, 2009; Feldman and van den Beek, 2016) and France (Squicciarini and Voigtländer, 2015; Franck and Galor, 2018).

However, such a differentiation between types of training also spread its interest to an intermediate type of training, halfway through primary and higher education, that had not been considered before: knowledge transmission in the workstation or apprenticeships. The work of Humphries (2003) is the first one to acknowledge the importance of apprenticeships in the British Industrial Revolution. Other authors delve into the study of this type of knowledge in order to confirm the crucial role of technical knowledge in the English industrialization (Meisenzahl and Mokyr, 2012; Kelly et al., 2014; Zeev et al., 2017), given its importance in the development of capital-intensive industries, the increased efficiency derived from the training process, as well as the capacity of the system to adapt

to the new socioeconomic conditions (Humphries, 2003; Mokyr, 2008).

Following this line of research, and just between the educational level providing basic literacy and numeracy and a more specialized level corresponding to that of higher education, Diebolt et al. (2021) have recently considered a new level of human capital characterized by the fact that it provides "intermediate skills formed by the diffusion of basic general knowledge that goes beyond basic literacy and numeracy skills" (Diebolt et al., 2021, p. 169). In other words, an *intermediate* kind of human capital: a more sophisticated type of training than that provided by primary school, but in any case generalist and not aimed at learning a particular discipline or profession. Various historical experiences corroborate the importance of this type of training. As Goldin and Katz (2008) point out, the intense development of secondary education in the United States after independence was the primary basis on which the economic success of American industries of the Second Industrial Revolution was based. According to this interpretation, the extension of secondary education in the form of the proliferation of new schools in which this stage was taught led to the diffusion of general knowledge skills, which went beyond mere reading, writing and basic arithmetic operations, and that were advanced enough to allow its graduates to adapt to a large number of medium-skilled jobs with relative ease. Unfortunately, secondary education as such is less-well documented in the literature, beyond some country-specific studies (Viñao Frago, 1982; Banks, 1955; Savoie, 2013). As post-elementary studies may be closely related to knowledge access and human capital formation, we believe that this gap limits our understanding of growth and development.

1.3 Secondary education in Spain in historical perspective

The truth is that the Spanish Enlightenment had been noting since the 18th century the importance of technical training related to hands-on knowledge, such as that of the arts and crafts (Rodríguez Campomanes, 1775). The progressive aban-

donment of the guild system revealed the need to create new educational institutions that could substitute the tasks of specific training of the labor force who was supposed to nourish the productive system. Paraphrasing Llombart and Astigarraga (2000), enlightened institutions such as the Economic Societies of Friends of the Country (*Sociedades Económicas de Amigos del País*) were the incubators from which numerous informal initiatives aimed at improving the practical knowledge of those who were part of the first industrial experiences were born. However, these first projects were very localized in space, because the main objective of the Societies was the promotion of proto-industrial activities in regions that already had a particular industrial specialization (Espejo, 2011).

It would not be until the last decade of the century when, due to French influence, some more serious pedagogical experiences started to take place in Madrid. This was the case of the *Real Gabinete de Máquinas*, created in 1791, or shortly after, the *Escuela de Caminos*, created in 1802. These institutions followed the model of the French *École des Ponts et Chausées*, in which many young Spanish scientists had studied during the last decade of the previous century by means of government fellowships (Rumeu de Armas, 1980; Ferri Ramírez, 2015). After the *Cortes de Cádiz*, the concern to create legislation related to state issues from a liberal perspective intensified. In this regard, the first education law after the 1812 Constitution —the Quintana Plan (1821)— already specified the separation of *Escuelas Especiales* (special schools), devoted exclusively to practical trainings, from the rest of teachings, although they were subsumed under the scope of higher education, where universities were found too (Araque, 2013). More relevant to our argument, the Quintana Plan will be the first legal text to recognize an educational system made up of three levels: primary, secondary, and higher education. This will be the genesis of secondary education as a separate educational stage.

Despite the fact that during the following decades there were various attempts to further regulate secondary education, the truth is that it would not be until the arrival of a relative political stability during the central decades of the century when we find the first initiative really aimed at articulating the stage: the Plan Pidal, passed in 1845. This law recognized secondary education as that of the

"middle classes",[1] recognizing that it should have a double utility. On the one hand, it should serve to "acquire the elements of knowledge indispensable in society or every regularly educated person"[2] and, on the other, as a previous step to pursue "the path for further studies, more difficult to acquire".[3] The recognition of this double utility implied *de facto* a certain disconnection between university and secondary education that required greater decentralization of the latter. Although the law modified several aspects that implied a concentration of educational power in the figure of the King and the Minister,[4] it was stipulated that all provincial capitals should have, from that moment on, a public secondary school (Ruiz Berrio, 2008). We cannot emphasize enough the importance of this provision since, as we will have the opportunity to see later, this will be the territorial distribution that will last in the country until well into the 20th century.

According to Antonio Gil de Zárate, the bureaucrat in charge of reorganizing the secondary education system with the *Plan Pidal*, the objective of this territorial approach to public school building was to build a base that could progressively feed on more teachers and students, thus gradually increasing the number of high schools (Gil de Zárate, 1855). However, the new system had to face several other problems that prevented this ideal situation from happening. In the first place, in many provinces high schools had to be accommodated in buildings with other uses —generally shared with other areas of the administration(Viñao Frago, 2008)—, given the lack of adequate spaces for conducting educational activities. Secondly, the creation of a new system of access to the teaching profession caused that, during the first years after the approval of the *Plan Pidal*, there still was not a significant number of teachers duly instructed to exercise it. In addition, and although there were spaces and teachers, on many occasions the financial situation of schools made it difficult to acquire teaching materials that would facilitate the pedagogical task (Gil de Zárate, 1855). Far from being solved, these problems persisted over time and eventually the number of public high schools remained

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1 *Plan General de Estudios presentado por José Pidal de 17 de septiembre de 1845*, preamble.

2 *Ibid*.

3 *Ibid*.

4 See, for instance *Ibid*., Section IV, Title II.

practically constant throughout the following years, and with few exceptions, during the second half of the 19th century, as we will have the opportunity to analyze in detail later.

Within this context, the Public Instruction Law (or *Ley Moyano*) was enacted in 1857. *Ley Moyano* basically put together most of the reforms that had been passed in the years before to articulate an actual education system. Secondary education was therefore organized in general and applied studies. After completion of the general course of studies (*estudios generales*), which lasted at least 5 years, students could take an exam to earn the *Bachiller de Artes* degree, which was an entry requirement for higher education, whether it was in normal faculties, such as law or medicine, or in and advanced technical schools, such as engineering. On the other hand, there were the so-called applied studies (*estudios de aplicación*), which were aimed at the learning of practical skills, related to a variety of maual trades, and that conferred the title of specialist (*perito*).

As we said before, the law prescribed that each province was supposed to have a public high school, while private centres were subject to a government authorization. Notable exceptions to this rule were granted to religious congregations and, in general, to any institution linked to the Catholic Church because of the Concordat with the Holy See in 1851. In addition, a new modality of secondary education was established, private tutoring, through which students did not attend face-to-face classes in high schools and prepared the contents of the subjects on their own, to finally take the final exam with the rest of students (*enseñanza libre*). Thus, public high schools ensured quality control as students had to pass the official exams to earn a degree. With slight variations, this regulatory framework remained practically unchanged until well into the 20th century. In fact, the Ley Moyano as such remained in force until 1970, when the *Ley General de Educación* was approved.

Considering this context, most of the historical studies on intermediate education in Spain during the 19th century have focused on analyzing the phenomenon of technical training. In addition, in this field there are many works of a commemorative nature on specific institutions that, however, have no analyti-

cal pretensions regarding the study of the relationship between technical training and economic development, or even the dynamics of extension of the educational system. The few that aspire to fulfill some of the objectives mentioned from a national perspective are those of Cano Pavón (2001), Díez Benito (2002) and Lozano López de Medrano (2007, 2014). This last work, which in our opinion is the most complete of those cited, meticulously reconstructs the process of creating technical and professional schools between 1857 and 1936 to conclude that technical education faced a good number of problems during the 19th century that caused it not to reach a certain relevance until well into the 20th century (Lozano López de Medrano, 2014). Focusing on the specific regions that led the industrialization process in Spain, such as Catalonia or the Basque Country, we also find interesting works that also reliably reconstruct the size and effectiveness of the network by estimating the number of centers and students. This is the case of Alberdi Alberdi (1980) and Monés i Pujol-Busquets (1991, 2005) for the Catalan case; and Dávila Balsera (1997) for the Basque Country. In any case, this is an aspect of the history of education in Spain that has been relatively little studied, especially in its relationship with the difficult Spanish industrialization.

Unfortunately, the historiographical treatment of secondary education, the stage that concerns us in this thesis, has not been much better. In fact, in the last years of the 20th century, Guereña (1988) highlighted the great lack of historical studies dedicated to secondary education, as opposed to primary or higher education, in Spanish scientific journals. The profession seemed to respond to Guereña's notice, since in a more recent review of the literature Viñao Frago (2010) acknowledged the increase, albeit moderate, in the number of works related to secondary education during the almost two decades that separate both publications. Be as it may, it looks like the study of secondary education does not arouse the same research interest as other aspects of the history of education in Spain, especially if we limit ourselves to the study of the 19th century. Here again there are many works dedicated to specific schools, cities or provinces (for a specific account, see Viñao Frago (2010, pp. 125-129)) which, given that they are conceived without any pretension to establish an analytical framework that allow for a better understanding of the dynamics at the national level, are only

partially useful for our purposes.

Circumscribing ourselves to the 19th century, we may divide the contributions that we found useful into two main groups. First, we find general studies on the educational stage, which cover a long period with emphasis on legislative aspects, and that also frequently include estimates of the number of students and the number of centers. In this sense, Viñao Frago (1982) was the first to analyze secondary education as a differentiated educational stage when investigating the relationship between politics and education in its conception and development. The book includes some estimates of the number of students which, although fragmentary, represent the first approach to secondary education that has been made from the point of view of historical statistics. Shortly afterwards, Díaz de la Guardia Bueno (1988) published a monograph devoted to the study of secondary education between 1875 and 1930, with special emphasis on the political substrate that motivated the successive legislative reforms affecting the stage. Interestingly, here we also find the first consistent statistical reconstruction of the number of students attending the stage at the national level, as well as the number of schools, both public and private, albeit only for certain years. Finally, it is worth mentioning the work of Sanz Díaz (1985), which focuses on analyzing the profuse regulation concerning the aspects of secondary education that were implemented throughout the century, from the regulations concerning the body of teachers, the public system of school funding or the curriculum of the different study plans. In relation to the latter, we also find other briefer works that have covered specific aspects of the system but always from the point of view of its regulation and rarely paying attention to aspects such as students, teachers or schools, as is the case of Negrín Fajardo (1983a,b) or de Puelles Benítez et al. (1996).

The second group of publications that, in our opinion, is of enormous value for the purpose at hand is the one dedicated to the study of the individuals who made up the secondary education system, namely teachers and students. With respect to teachers, there are several works focused on the mechanisms of accessing the teaching profession, the procedures for access to the teaching profession

and their economic and working conditions ((Benso Calvo, 1983; Villacorta Baños, 2012; Tarrós i Esplugas, 1995a,b)). In fact, there have been several proposals to go further in the study of secondary school teachers through, for example, going beyond the regulation and studying professional dynamics within the body and its effects on the educational system, its popularization within society or its quality (Benso Calvo, 1999). However, studies from this perspective are still scarce, despite recent calls for attention to its potential usefulness (Cuesta Fernández and Mainer Baqué, 2015). Regarding students, there are several works that have tried to trace the profile of the average high school student through the analysis of the personal files held in different high schools, as is the case of Sirera Miralles (2011) for Valencia, Altava Rubio (1993) for Castellón, Benso Calvo (1994) for Galicia, Hernández Díaz (1986) for Salamanca, Martín Jiménez (1994) for Valladolid, Domínguez Rodríguez (1991) for Cáceres or Sánchez Pascua (1985) for Badajoz.

All in all, there is a notable lack of comprehensive approaches to the secondary education system in 19th-century Spain that consider all its components and provide rigorous and consistent data that allow for the development and validation of hypotheses about the educational stage in the period, especially in its relationship with the industrialization process and, more generally, with economic development. The main objective of this thesis is to begin to fill this gap, offering the first complete and consistent statistical estimates of the secondary education system from 1860 to 1900 and developing some hypotheses about its evolution during that period, as we will see below.

1.4 Objectives and development of the thesis

As noted above, the main objective of this thesis is to establish the evolution of the secondary education system in Spain during the second half of the 19th century, between the approval of *Ley Moyano* in 1857 and the turn of the century. The choice of this time frame responds to several factors. The start date is obvious. The *Ley Moyano* of 1857 constitutes the first great Spanish educational law that considers a single educational system articulated in three levels: primary,

secondary and university. It is thanks to this law that the educational stage is established as such and begins to function through public high schools (*institutos*) and private schools, with their own study plans and a specialized teaching staff. The completion date corresponds to the turn of the century and coincides with the emergence of a public debate about the situation of secondary education that entailed a series of legislative changes (Díaz de la Guardia Bueno, 1988). The disaster of 1898, the loss of the colonies —a turning point in Spanish economic history, according to Betrán and Pons (2020)— and the feeling of general pessimism that spread in Spain in those years also made itself felt in complaints about the situation of the educational system that prompted the government to carry out a series of reforms in secondary education (Díaz de la Guardia Bueno, 1988; Otero Carvajal and de Miguel Salanova, 2022). Thus, during the first decade of the 20th century, a series of modifications were introduced aimed at solving the major problems that had been detected in the educational stage during its first 40 years of life, with special emphasis on the reform of the study plans, considering which should be the objective of *Bachillerato*, on the one hand, and to clarify the role of private schools, to which great freedom had been granted from 1880, on the other. Thus, our interest lies in this first stage of secondary education elapsed between the approval of *Ley Moyano* and 1900, precisely to find out if the problems discussed were real and could have had a negative effect on the development of the system.

To establish the evolution of the secondary education system in this period, we have decided to undertake two fundamental tasks. The first of these is to carry out, for the first time in the literature, a broad and consistent statistical reconstruction of the main educational variables related to secondary education, such as the number of students, gross enrollment rates, the number of schools, both public and private, and the number of teachers. This overview will allow us to obtain a first image of the general dynamics that characterized the educational stage during this period. Once the system has been described in quantitative terms, we will try to elaborate some hypotheses about the evolution of some of its variables, in order to improve our understanding of the causes of the situation that led to the need to promote some of the reforms at the beginning of the 20th

century.

Chapters 2 and 3 of the thesis are dedicated to the first task. Chapter 2 offers a statistical reconstruction of the number of students, the gross enrollment rate, and the number of schools, both public and private. To do this, we have resorted to a good number of historical sources, most of which had not yet been used for this purpose, which have allowed us to obtain estimates of the variables outlined above for each decade between 1860 and 1930. We have deliberately extended the scope of the estimates beyond the time period covered by the thesis, in order to better contextualize the figures observed within the study period. In estimating the number of students, a differentiation of students by teaching modality has also been carried out: public (*oficial*), private (*colegiada*) and private tutoring (*doméstica*). This has allowed us to establish the percentages of students who studied in each of the modalities in each decade, which is of enormous interest given the complicated relationship between public education and private education during this period. Using the demographic information available in the Population Censuses, we have also been able to calculate the gross enrollment rate (GER) for secondary education. In this case, we have chosen to calculate the GER in two ways: the first, considering the total population; the second, considering only males, given the practically testimonial presence of women in secondary education until well into the 20th century. In addition, we have estimated the number of public and private schools nationwide throughout the period. This has allowed us to verify that the public school network barely grew between 1860 and 1900, while the number of private schools went from 55 in 1860 to 608 in 1900. Taken together, the evolution of both the total numbers of students, gross enrollment and the number of schools reflect a situation that largely corresponds to the anemic state of the educational stage: the total number of students barely grew in 40 years between the approval of the *Ley Moyano* and the turn of the century, while gross enrollment did not exceed 1%.

Chapter 3 contains the statistical reconstruction of an aspect of the educational system that, due to its relevance, requires a detailed analysis separated from the rest of the variables: the body of high school teachers (*catedráticos*). Using for the

first time in the literature the official promotion rosters (*escalafones*) in a systematic way, we try to provide an overview of the number of members that made up the body, their disciplines of specialization and their professional destinations. This allows us to obtain some intuitions about the deployment of the public educational system throughout the Spanish provinces. In the first place, that the provision by the State of specialist teachers in Spanish institutes was done relatively quickly over time, so that soon all the Spanish provinces had a complete set of teachers for the basic subjects included in the study plans. However, and as we have described above, the apparently effective deployment of elements that made up the educational system failed to increase the number of students or the enrollment rate. Thus, in the following chapters we ask ourselves what the causes and consequences of this were, both from the perspective of students and the private response to the public incapacity to create new public schools.

Chapter 4 aims at developing and contrasting a hypothesis that explains the reduced capacity of the secondary education system to attract new students. Specifically, we hypothesize that the territorial structure of public high schools —located almost exclusively in the provincial capitals— impeded or greatly hindered access for most of the population, which at that time was still eminently rural. Using individual-level data obtained from a hitherto unknown historical source, we show that the size of the student's home municipality is related to the costs that the student would have to face during their education. Although the economic and social context of households in the Spanish countryside are enormously relevant aspects for this result, we also suggest the importance of the lack of contact with culture and knowledge, through the concept of away-from-knowledge (AFK) areas, as a complementary but equally relevant factor in the explanation of this situation. Of course, distance to provincial capitals is another factor to take into account and it would be easy to argue that the greater presence of secondary schools in a greater number of municipalities would facilitate access and, therefore, increase the number of students.

The objective of Chapter 5 is precisely to study the process of territorial expansion of private schools, analyzing the factors that determined the decision to es-

tablish a new school. To do this, we use the statistical reconstructions presented in Chapters 2 and 3 and relate them to data at the municipal level on population and literacy. Through a probabilistic model, we study which were the demographic, economic and social factors that influenced the creation of new private schools in Spanish municipalities during the period under study. In other words, we try to understand what the pattern of territorial extension of private secondary schools was. Our results suggest that the new private schools responded to demand criteria when choosing to establish themselves in certain municipalities. The transfer of students that occurs from the public to private schools (see Chapter 2) would only confirm that private schools covered a need that the State was not providing—getting closer to the people.

Chapter 6 carries out a recapitulation of the main results obtained in the different parts of the thesis, establishing to what extent they contribute to answering the research questions raised in the Introduction. In addition, we show the potential that these results have in the pursuit of the historical study of secondary education in Spain through different possible lines of research.

Chapter 2

Secondary education enrollments in Spain, 1860-1930

2.1 Introduction

One of the first steps when it comes to unraveling the relative success or failure of an educational stage should consist in measuring its capacity to penetrate the society it serves and, therefore, its capacity to influence the youngest cohorts and their life paths. This is especially relevant in basic educational stages, those that provide the most elementary knowledge such as reading and writing, since in addition to being the ones that transmit the necessary skills for life in any contemporary society, they are the ones that first put the student in contact with knowledge. It is a fact that once contact with knowledge is established, it is much easier for the student to choose to continue studying, even if it is briefly and sporadically. In the same way, it is equally important to measure the degree of penetration in society of other educational stages that, even if they are not those in which the most basic knowledge is taught, are essential in the training of workers who can nurture certain economic sectors, either directly after completing the stage or as preparation for access to certain higher stages of more specialized training.

From this point of view, intermediate educational levels become a relevant aspect when analyzing the capacity of educational systems to transform the society

and economy on which they are based. The importance of technique, understood as the application of scientific discoveries to the resolution of practical problems, especially after the First Industrial Revolution, has persuaded researchers about the role of intermediate educational stages in economic growth and development. On the one hand, because it is the intermediate stages that provide the necessary technical knowledge to be able to face higher level or specialization studies, such as university studies. On the other hand, and more decisively, because most Western countries conceived, as part of the structure of secondary education, technical or application studies whose main objective was the learning of specific practical disciplines with the sole purpose that their graduates could enter the labor market in positions that required a certain qualification.

To the best of our knowledge, this chapter is the first to provide a set of educational variables related to secondary education for Spain in years 1860 to 1930, that is, the period when the secondary education system developed more intensely. We provide harmonized estimates at the national and provincial (NUTS3) level for the following variables: number of secondary education students, both total and by mode of study (in public schools, private schools or by private tutors); secondary education Gross Enrollment Rates (GER), for both genders and for males only; and the total number of public and private secondary schools. As we anticipated in the Introduction, there existed three different modalities of study: official schooling, which refers to all students who regularly attended attended classes in public high schools (*institutos*); private schooling, which refers to all those students who regularly attended classes in private centers; and private tutoring, which refers to all those students who prepared the contents of the educational stage on their own or through private teachers and then took the exam to obtain the degree. All these variables are estimated for the period 1860-1930 in ten-year intervals, that is, for the following benchmark years: 1860, 1870, 1880, 1890, 1900, 1910, 1920 and 1930. Although this thesis is focused on the period 1857-1900, we decided to extend the estimations up to 1930 with a view to better contextualize our study period. In addition, this allows us to be in line with other recent estimations of educational variables that have considered the period 1860-1930 (Beltrán-Tapia et al., 2019, 2021). However, due to the nature of

the sources available for this period we have not been able to obtain data for all variables in these specific reference years, so that in some cases we had to resort to data for nearby years.

2.2 Sources and data

The nature of the sources consulted differs depending on the different parts of the period 1860-1930. Regarding the number of students who attended secondary education, the information has been obtained from two main types of sources. For the first years until the 1890s decade, the reconstruction of the data has been carried out through the information related to education contained in generalist statistical publications such as the *Anuario Estadístico de España* or the *Gaceta de Madrid*. The launch of an educational statistical publication of its own from 1889, the *Anuario Estadístico de Instrucción Pública*, has served to obtain data between 1890 and 1910. For the two benchmark years after that date, the *Anuario Estadístico de España* has been the main source of information. In addition, for information on private schools in year 1880, it has been necessary to resort to archival sources in the Archivo General de la Administración (AGA).[1] Regarding the information on the population in the age group that can attend secondary school, the information has been obtained from the Population Censuses. The References section at the end of the article contains a detailed description of the sources used to estimate the variables in each year.

The number of secondary education students includes the number of students enrolled in secondary education in any of its modalities: public schooling, private schooling or private tutoring. Likewise, secondary education Gross Enrollment Rates (GER) is computed as the ratio of students enrolled in secondary education over the number of children in age to theoretically attend secondary school. However, deciding the theoretical age in which secondary education is to be taken is not a straightforward decision. Choosing an age range other than that previously used in the literature prevents effective comparison of results. However,

[1] Archivo General de la Administración (AGA), IDD (05)016.000, box 32-09148.

the different configuration of educational systems in different countries over time means that the theoretical age for each educational stage is not always the same. In this paper, as we are dealing only with the case of Spain, we have decided to give priority to the interpretive potential of the figures taking into account the pedagogical and social context of secondary education in Spain during the last decades of the 19th century and the beginning of the 20th.

Although this is the first attempt to estimate GER figures at the provincial level, previous attempts to compute such figure at the national level for Spain have relied on different theoretical age brackets for secondary education students. Núñez (2005), for instance, estimated GER figures considering two intervals: that of 10- to 19-year-olds and that of 14 to 19 year-olds, following the brackets proposed by the UNESCO (1958, 1961, 1966). Lee and Lee (2016), in an attempt to estimate and harmonize long run enrollment rates for a number of countries rely on the same age brackets, although considering 5 to 14 years old to be the theoretical age of primary education, and 15 to 19 of secondary education. In this article, we have opted for a slightly laxer theoretical age, from 10 to 20 years old, due to two main characteristics of the Spanish case.

Firstly, because some Population Censuses reported population in five-year intervals, without disaggregating by specific ages. Thus, the choice of 10 to 20 years as the theoretical age allows us to harmonize more information derived from the Population Censuses. Secondly, because the Spanish secondary education system embraced, especially during the 19th century, an enormous variability in the ages of its students as a reflection of the large number of vital trajectories that gathered in its classrooms, as a result of the low implantation of the educational system and the still low value placed on education by the society of the time. In fact, as we show in Chapter 4 of this thesis, around 85% of secondary education students in academic year 1877-1878 graduated when they were between 10 and 20 years old, thus confirming that this was a common age bracket for high school students during the second half of the 19th century and presumably also during the first third of the 20th.

Data on population in the different age brackets can be found in the Popula-

tion Censuses between 1860 and 1930. However, no information on population by age is available for year 1870. Thus, a linear interpolation for population in each age between 1860 and 1877 has been used. For year 1860, information on number of individuals by age is provided on 5-year intervals and, thus, the computation is done with years 11 to 20. The linear interpolation of year 1870 has been done with population between 11 and 20, both in 1860 and 1877, to allow for comparison. Thus, the denominator in 1860 and 1870 is lower than the real number and GERs in this period may be slightly over-estimated.

In addition, we have considered a new measure of gross enrollment rates that only takes into account men in the theoretical age to study. The calculation of this new measure allows us to obtain a more refined vision of the reality of the enrollments given that the possibility of accepting women in official education (*enseñanza oficial*), that is, attending lessons on equal terms as their male counterparts, was not even considered by the 19th-century authorities since it was unthinkable that both sexes could share the same physical spaces. In fact, women were not accepted as official education students until well into the 20th century and, even then, they usually found an attitude of rejection by male students and teachers in the form of continuous signs of inconsideration and disdain (Flecha García, 1998; Viñao Frago, 1990). In fact, no official statistics included a breakdown of secondary education students by gender until 1910, in notable asymmetry with statistics on primary education, which had included this information since its inception in mid-19th century.

However, the possibility of enrolling as a private tutoring student —that is, without the possibility of attending lessons— had existed for women since 1872, when the first application by a woman was made. From that moment on, the enrollment of women in secondary education increased gradually. It has been estimated that a total of 341 females enrolled in secondary education between 1872 and 1899 (Flecha García, 1998, pp. 167-175). If we consider only those who managed to graduate, we know for instance that in the 1877-1878 academic year only 2 women graduated, making up 0.07% of all graduates in that year (see chapter 6). Around 30 years later, in the 1909-1910 academic year, 32 women graduated

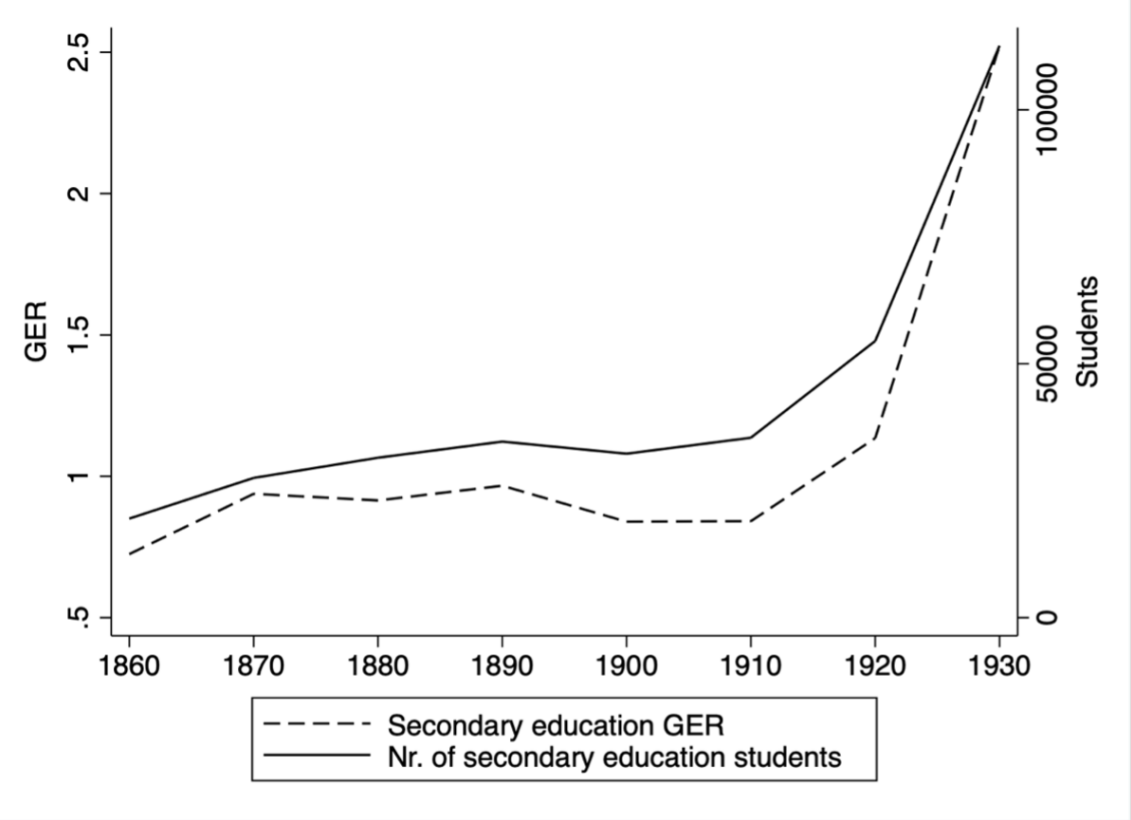
(Flecha García, 1998, p. 175), which still constituted a small percentage of the total number of graduates in that year. Thus, and given the reduced presence of women in secondary education until well into the 20th century, gross enrollment rates for the 19th-century considering only the male population in school age is also provided as a reference.

2.3 The number of secondary education students: trends and patterns

Figure 2.1 shows the evolution of the number of secondary school students, both in absolute figures and as the total (male and female) gross enrollment rate. The evolution of both variables reflects two well-differentiated time regimes. The first of them, between 1860 and 1910, is a period in which the educational system is not capable of broadening the student base of the educational stage, and is characterized by a slight increase in the absolute number of students and a stagnation in gross enrollment rates. The second regime, between 1910 and 1930, is characterized by the rapid growth of both variables, especially in the decade between 1920 and 1930.

To try to better understand the dynamics that may be behind this behavior, it is interesting to analyze the breakdown of the total number of students in the different teaching modalities (public, private or private tutoring). Figure 2.2 shows an initial situation, during the 1860s and 1870s, in which the predominance of official education was clear compared to domestic and private education. This can be attributed to the novelty of the formal introduction of the educational stage after the *Plan Pidal* in 1845 and its consolidation with the *Ley Moyano* in 1857. This meant that its presence in the education system during the first years two decades after the passing of the law was articulated almost exclusively through public high schools (*institutos*) and not so much through private centers, the amount of which was still very limited, among other things due to the lack of qualified teachers to impart such relatively advanced levels of knowledge (Benso, 2002).

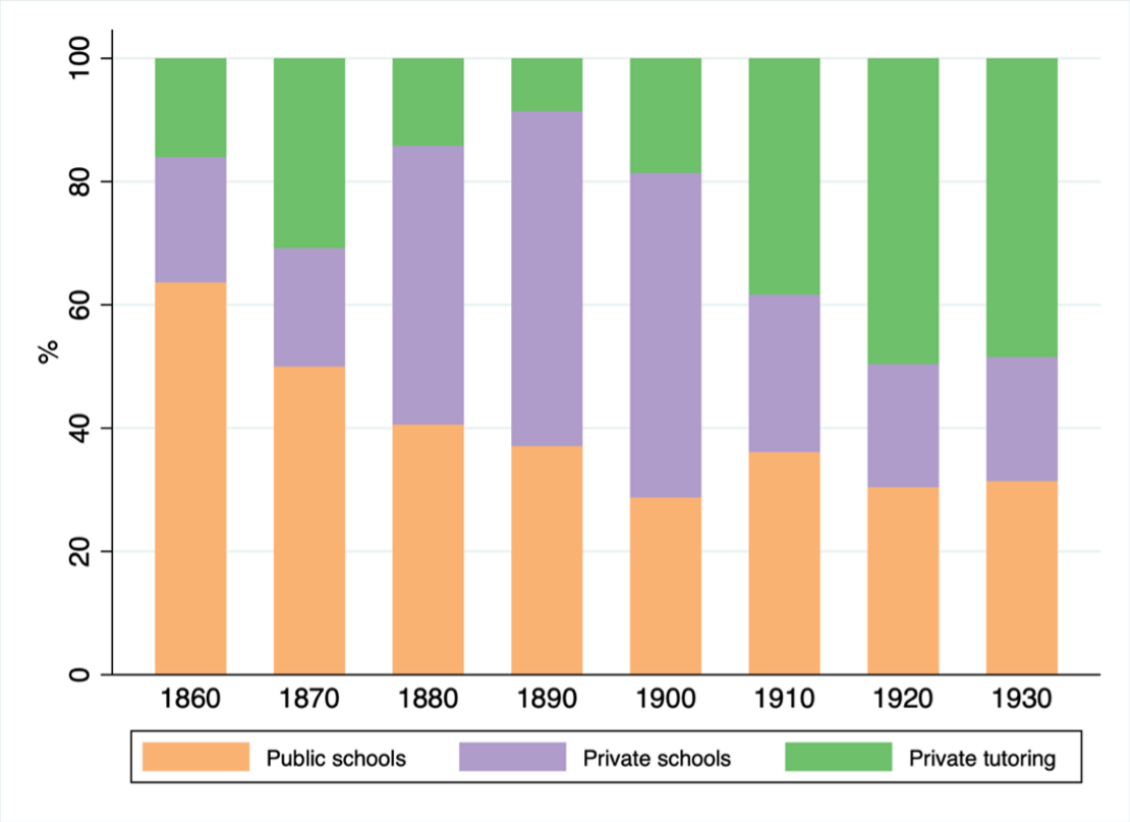
Figure 2.1. Secondary education students and total GER, 1860-1930.



Source: see text.

The second stage took place between 1880 and 1900 and was characterized by the boom in enrollment in private schools and the relative decline in public schools, a fact already observed by Viñao Frago (1982). The factors that explain the explosion in the number of private schools are diverse. In the first place, the time elapsed since its introduction had allowed the establishment of secondary education as an educational stage. On the other hand, political disputes in the educational field led to the approval of numerous legislative changes aimed at making the requirements for the opening and operation of private educational centers more flexible, especially those related to the Church. The approval of the Associations Law of 1887, which protected the freedom of initiative of organizations such as religious orders, together with the close relationship of the Church with local elites in a number of territories, led to the creation of a large number of private schools during these years, mostly sponsored by the Catholic Church. As we will show in Chapter 5 point out, the creation of new private centers followed a spatial pattern closely linked to demand, since they tended to locate in

Figure 2.2. Percentage of total students by modality, 1860-1930.

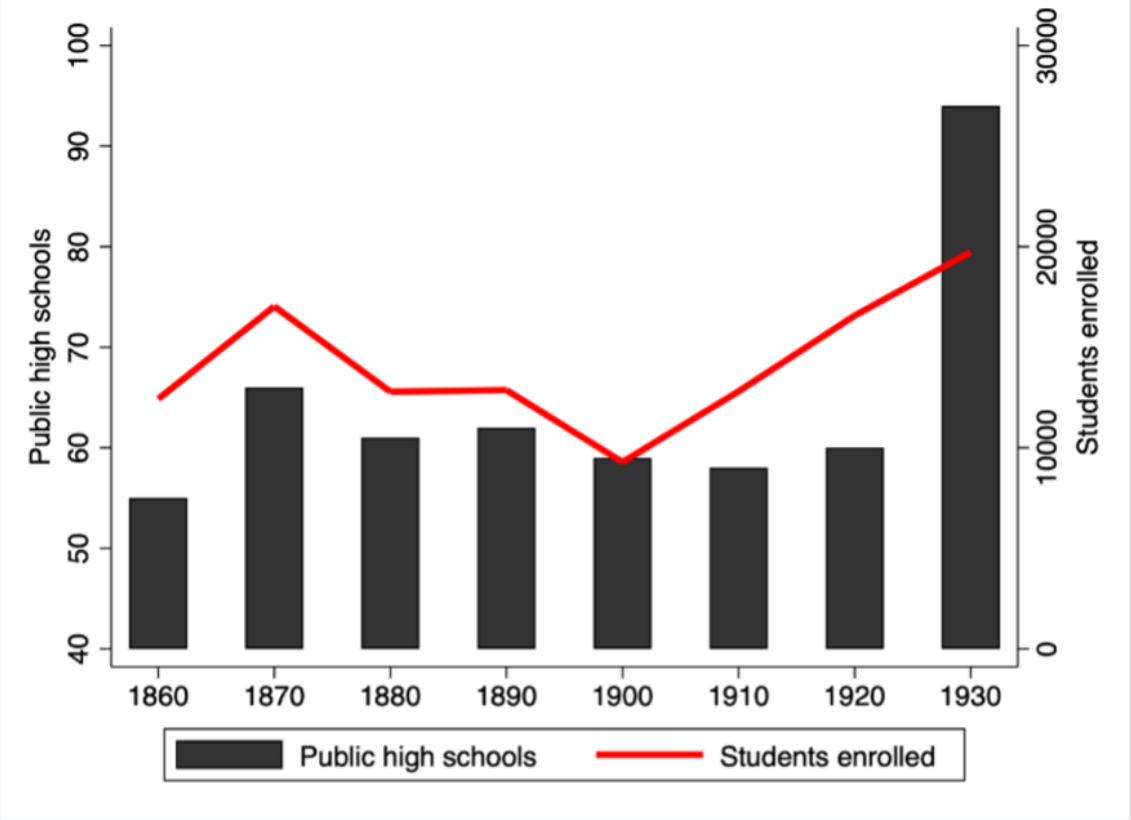


Source: see text.

municipalities with higher population growth rates in previous decades, with higher literacy rates or headquarters of administrative institutions. The importance of this fact cannot be exaggerated, since in practice it entailed relocating secondary education and bringing it closer to most of the population, which for the most part continued to be located in rural areas. Figure 2.4 shows the explosive growth of the private network both in terms of schools and in the number of students enrolled.

With the turn of the century, however, the tightening of the requirements that private centers had to meet led to the disappearance of many of them and, thus, the decrease in the number of students enrolled. However, during the last years of the 19th century the number of public schools had barely grown (Cruz Orozco, 2012), as shown in Figure 2.3, in line with the system of provincial high schools that had been instituted in the central decades of the century. The drastic decrease in the number of private centers that had flourished during the previous

Figure 2.3. Number of public schools and students, 1860-1930.



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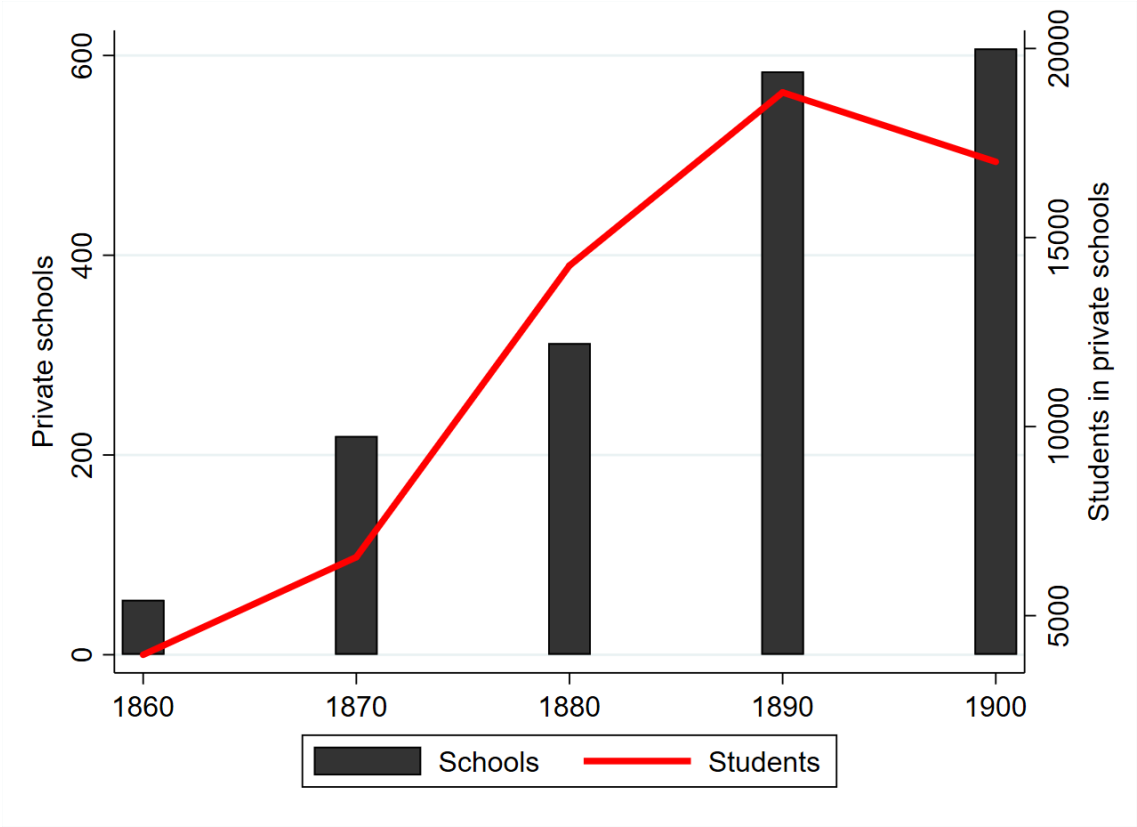
decades led to a return to the concentration of secondary education in the cities where public high schools were located. However, the expansion of private education had meant an extension of the educational stage throughout the territory and, consequently, a certain degree of popularization and awareness of its potential interest and usefulness, as shown by the sustained increase in the number of students from 1900 (Figure 2.1). In this context, the modality of private tutoring (*enseñanza libre*) was configured as the natural option for a large majority of students interested in studying secondary education. Indeed, and as Figure 2.2 shows, the number of students enrolled in private tutoring increased considerably during the first decades of the 20th century, reaching virtually 50% per cent of total enrollment in 1920, at the cost of an abrupt reduction in the number of students enrolled in private centers, while enrollment in public high schools remained practically constant.

Figure 2.4. Number of private schools and students, 1860-1900.



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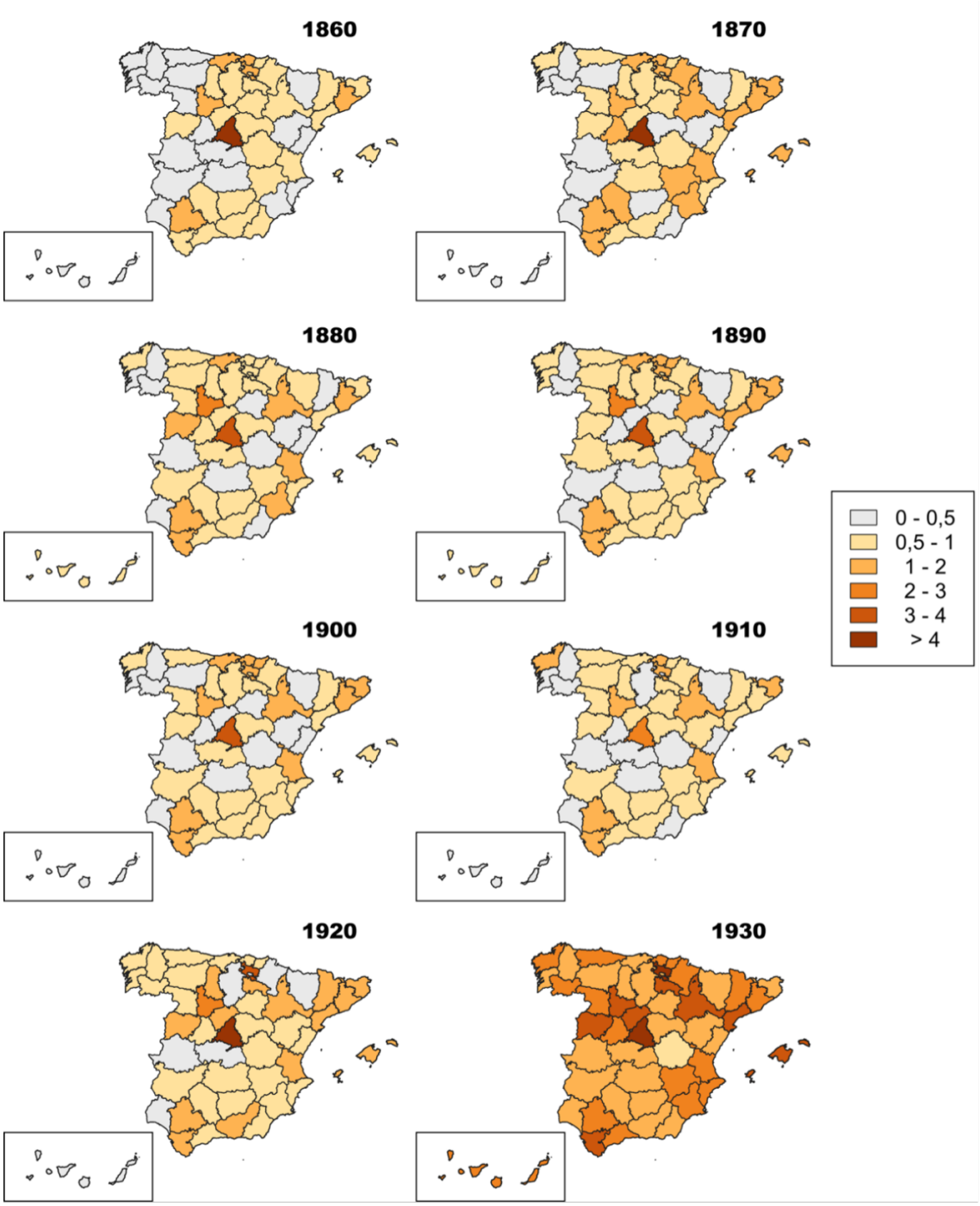
2.4 The spatial distribution of enrollments

Figures 2.5 and 2.6 show the evolution of total secondary education gross enrollment rates, for both sexes and only for males, from a provincial perspective for all time landmarks from 1860 to 1930, excluding the territories of Ceuta and Melilla.

The first issue that draws attention is the primacy of the province of Madrid throughout the period under study. Beyond the capital status effect and its implications in economic and social terms, it should be taken into account that Madrid was until the decade of 1920 the only city that had two public high schools (San Isidro and Cardenal Cisneros), as opposed to what happened in the rest of the country.[2] In addition, the fact that the Central University was located in Madrid meant that the city had a greater number of education centers, resources and, in

[2] There were several provinces with more than one high school before 1920 (Viñao Frago, 1982), but only in Madrid were they located in the same city.

Figure 2.5. The evolution of secondary education total GER (%) in Spanish provinces, 1860-1930.

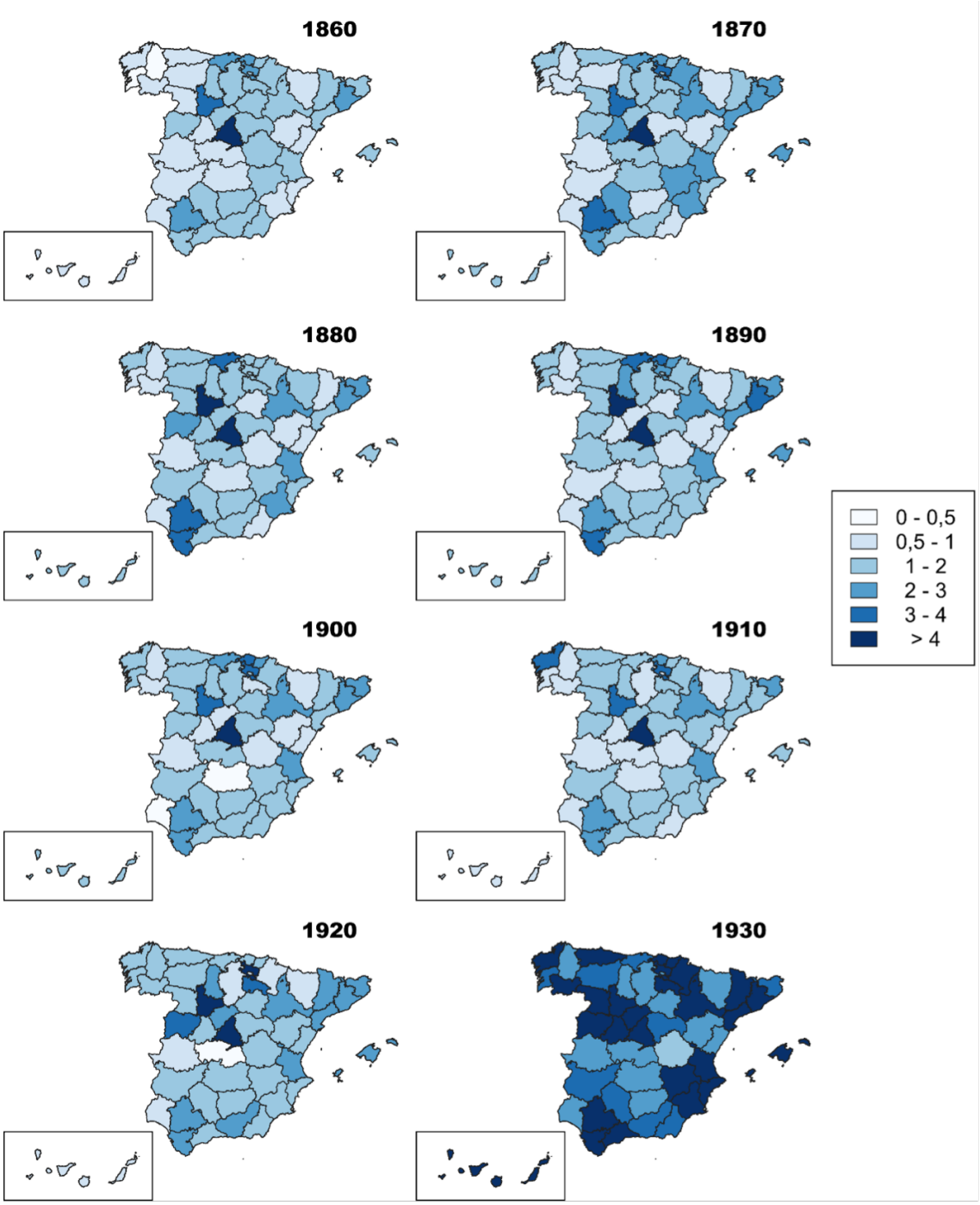


Source: see text.

short, more academic possibilities for students who were considering undertaking university studies.[3]

[3] For instance, according to the *Ley Moyano* (article 136), the only Faculty of Science in the country was to be located in Madrid. In addition, most superior schools (Fine Arts, Engineering, Trade…) were also exclusively located in the city. Also importantly, and according to arti-

Figure 2.6. The evolution of secondary education male GER (%) in Spanish provinces, 1860-1930.



Source: see text.

The second characteristic observed is that, in general, literacy rates are consistently higher in provinces that were the seat of a university district or which had

cle 129, the University of Madrid was the only one in the country allowed to issue doctoral degrees.

more than two public high schools.[4] Beyond the fact that they were generally the most populated cities in the country, and as Sirera Miralles (2011) has pointed out for the case of the province of Valencia, factors such as the demographic distribution of the province and, in a more decisive way, the articulation of the provincial territories and their relationship with the capital must also be taken into account. In any case, university cities gave rise to a kind of knowledge-agglomeration economies encouraged by the presence of knowledge-access institutions (Dowey, 2017) that allowed the approach of knowledge to the population and, ultimately, a change in the social assessment of its usefulness. On the one hand, because the cultural context of a university city was an incentive for all those from the city and the province to continue their studies beyond primary education. On the other hand, because the greater possibilities of working in jobs for which a Bachiller degree was necessary could encourage many students to move to these cities to carry out their studies.

The general increase in enrollment rates that took place at the end of the study period, during the 1920 decade, has to do with the paradigm shift in the creation of public high schools that took place during the Primo de Rivera dictatorship. The unsustainable situation of the old public high schools created in the 19th century, which barely had the means to meet the growing demand, led to governmental initiatives to create new high schools, either directly or through the initiative of local entities, practically doubling the number of public institutes towards the end of the decade (López Martín, 1994; Cruz Orozco, 2012). However, and as Canales Serrano (2011) has studied, the Francoist victory in 1939 led to the closure of nearly half of the public high schools that existed before the start of the war, as shown in Table 2.1.

Table 2.1. Number of public high schools before and after the Civil War.

	1936	**1939**	**1940**	**1942**
Number of public high schools	206	113	114	117

Source: Canales Serrano (2011).

The criteria chosen to carry out this drastic reduction had to do with popu-

[4] These were Barcelona, Coruña, Granada, Madrid, Oviedo, Salamanca, Sevilla, Valencia, Valladolid and Zaragoza.

lation, which ended up condemning some institutes located in small towns that, however, acted as a reference center for students from rural areas who could not afford to travel to the largest cities or the provincial capital. In chapter 5 of this thesis we will demonstrate that this situation was not new in the Spanish socio-educational context and that inequality of opportunities in access to secondary education already occurred in the 19th century, given the particular institutional structure of Spanish high schools.

2.5 Conclusions

This chapter of the thesis has reconstructed the secondary education network in terms of students and number of centers, both public and private, between 1860 and 1930. In addition, for the first time in the literature, these estimates have been provided at the provincial level for all Spanish provinces, differentiating by the different modalities of study. In addition, and trying to move away from traditional estimates that considered the number of students only, the computation of gross enrollment rates and the number of schools have allowed us to obtain a much more detailed image of the situation of secondary education in Spain during the years object of study of the thesis. The next step in the reconstruction of the educational stage is to know the number of teachers who taught in it, their disciplines of specialization and their territorial distribution, through the analysis of the different schools in which they taught. This is the objective of Chapter 3.

Chapter 3

Catedráticos in the making of the Spanish secondary education system, 1861–1885[1]

3.1 Introduction

In the preceding chapter, we have attempted to reconstruct the main educational variables of the Spanish secondary education network between 1860 and 1930, with a special focus on the period spanning the second half of the 19th century. However, we believe that there is an aspect of the educational infrastructure that is sufficiently important to deserve a detailed study that is separate from the rest: the faculty in charge of teaching secondary education. There are several reasons that have led us to undertake this separate analysis with the hope that this will allow us to obtain new perspectives on the process of extension of the secondary education network.

Firstly, because the creation and subsequent development of the body of high

[1] A version of this chapter has been published as the following journal article: Insa-Sánchez, P. (2022) "Catedráticos in the making of the Spanish secondary education system, 1861-1885", *Paedagogica Historica: International Journal of the History of Education*, 58(2), 215-232.

school teachers (*catedráticos*)[2] must be understood, in addition to being a fundamental part of the educational process, as part of the process of construction of the liberal State that was taking place in Spain during the second half of the 19th century. In this sense, and as one of the extensions of State action when it comes to equipping itself with its new structures, the reality of teachers transcends the merely educational context to also nourish itself from the convulsive social and political context of Spain at the time.

In fact, the literature has repeatedly pointed out the role that education could have had as a "nationalizing agent" (Calatayud et al., 2009, p. 119) in the context of the construction of the liberal State. Historians who support this premise advocate the adoption of *bottom-up* approaches that allow to obtain new insights on the role of education in the society of the time, including a better understanding of the link between education and economic development. These new approaches to the educational phenomenon would imply challenging some of the traditional judgments about the precariousness of the educational supply to give more prominence to demand issues, which could have had a much greater relevance than traditionally considered (Calatayud et al., 2009). These approaches match the proposals made from historians of education who call for adopting a perspective that go beyond local studies and consider educational institutions in their relationship with other administrative entities, stressing the role individual educational establishments in specific socio-economic contexts may have had in shaping educational policies at the state level (Compère and Savoie, 2001; Savoie, 2003; Savoie et al., 2004). For the specific case of secondary education teachers in Spain, in addition, this approach responds to more recent proposals that call for an exhaustive analysis of promotion rosters as a useful source to gain knowledge about teachers' postings in order to get not only a more complete picture

[2] We opt not to use the English word *professor* in this chapter since the meaning of that word in English-speaking countries does not correspond exactly with the usage in Spanish. Although in a university context, the Spanish word *catedrático* and the English *professor* are equivalent, in Spain we can also find secondary education *catedráticos* without any connection with universities. However, in English-speaking countries the word *professor* refers to the highest rank of university faculty, and professionals of secondary education are only referred to as *teachers*, never as *professors*. In order to avoid confusion, we stick to the Spanish word *catedrático* throughout the text, although we will use *catedrático* and *teacher* interchangeably in cases when there is no contextual confusion in order to favor text fluency.

of their professional field, but also to learn about new channels through which the creation of a national education system took place (Cuesta Fernández and Mainer Baqué, 2015)

Taking these considerations into account, this chapter is aimed at providing a general picture of the professional situation of secondary education teachers (*catedráticos*) during the second half of the 19th century in Spain. Our main objective is to provide an aggregate perspective on the country's system of secondary education through its teachers. In particular, we analyse the process of teacher enrolment, their experience, geographical location, and the subjects they taught in order to learn more about the process of implantation of the education system from the perspective of one of its main actors.

In order to do so, we structure this chapter in four sections. In Section 3.2, we provide a general description of the construction of the secondary education system during the first half of the 19th century, emphasising the processes of high school creation and teacher hiring. We also provide an overview of the administrative regime of teachers during the second half of the 19th century, relating their seniority and their location in the different sections of the promotion rosters. In Section 3.3, we analyse the sources and the methodology used to carry out our analysis, stressing the importance of *catedráticos* in the context of the secondary education system. Section 3.4 presents the results, focusing on the total number of teachers, their distribution among sections, years of experience, subjects they taught and geographical location. Section 3.5 discusses the results and concludes.

3.2 Historical context

Secondary education as a separate educational stage is a liberal creation (Gil de Zárate, 1855; Viñao Frago, 1994). The introduction of a third educational level between primary and university emerged in the middle of the French Revolution from the proposal of the Marquis de Condorcet, which was made official by law in 1802 (Gutek, 1995). In Spain, the first division of the educational system into

levels that included secondary education is found in the *Informe Quintana* of 1813, a clearly liberal text that emerged after the deliberations on public instruction that took place during the *Cortes de Cádiz*. This text, despite never becoming law, was the main precedent of the ephemeral *Reglamento General de Instrucción Pública* of 1821, in force during part of the Liberal Triennium (1821–1823). Despite the return to absolutism with Ferdinand VII during the Ominous Decade (1823–1833), the spark of a new system of public instruction had ignited and secondary education as a separate educational stage would remain fixed in subsequent study plans, regardless of the ideology of its promoters. Making the ideals of liberal education come true implied the creation of a new type of educational facility exclusively devoted to secondary education, as it had already been done in Germany with the *Gymnasium* and in France with the *lycées* at the beginning of the century (Savoie, 2013).

However, in the Spanish case, this process had to embrace the educational context of pre-liberal Spain, characterised by the presence of educational institutions such as *Universidades Menores* and *Colegios de Humanidades*, where degrees related to law, philosophy, or humanities were offered mainly to train public officials. The expulsion of the Jesuits in 1767, as well as the gradual process of land decoupling, also influenced the role of the new liberal educational institutions. The need to create such a system brought as a consequence an important legislative output aimed at regulating the contents to be taught in secondary education, the functioning of high schools, and the regime of its teachers. Although the first reference to secondary education establishments as *institutos* can be found in the *Plan del Duque de Rivas* in 1836 (Sanz Díaz, 1985, p. 105), it would not be until the onset of the *Plan Pidal* in 1845 that an explicit regulation of the characteristics of such establishments and the teachings imparted in them first appeared.

This law was the first one to offer a unified structure of the educational system, setting the differences between its different stages. Specifically, it stated the different educational stages (primary, secondary, and technical) and their respective curricula; the characteristics of the educational facilities; the regime for teaching staff, including how their remuneration was to be determined; as well

as other provisions regarding the daily functioning of schools and their internal rules. The *Plan Pidal* also stipulated that all provincial capitals should have a high school, which caused the proliferation of new high schools during the same year the law was passed (Viñao Frago, 1982, pp. 397-407). As a consequence, the consolidation of high schools as the central figure in the new secondary education system acted in parallel with the progressive introduction of this type of establishment in all provincial capitals. Also relevant were the provisions devoted to the funding of schools, as they would determine the general structure of educational funding that would last throughout most of the century. Focusing on high schools, article 58 established that their main sources of funding should be the amounts obtained as tuition and degree fees, as well as rents from other institutions.[3] Only if these two sources combined were not enough to sustain school expenses, should provincial councils (*diputaciones provinciales*) provide the remaining quantities needed. Given that the amounts obtained as tuition and degree fees were rather meagre,[4] the appeal to provincial councils in order to obtain funding was usual.

The success of high schools as formative institutions implied that teaching duties had to be exerted by technically capable faculty. Teacher hiring before 1845 was characterised by its "casualness, improvisation and unreliability" (Benso, 2002, p. 296). In addition, it was usually difficult to find suitable candidates to sit the admission exams. Boosting the creation of high schools all over the Spanish geography with *Plan Pidal* entailed the need to establish a more elaborated plan for the massive recruitment of teaching staff. The characteristics of the Spanish school system up to the 19th century, just like the previous inexistence of a formal body of secondary education teachers, made the selection of suitable candidates extremely difficult and compelled the administration to create a system that allowed the selection of candidates with a suitable training (Cuesta, 1997, p. 129). Due to the absence of references, the government decided to implement a system

[3] *Real Decreto de 17 de septiembre de 1845, aprobando el Plan General de estudios*, preamble.

[4] See, for instance, Sirera Miralles (2011, p. 331). In the case of Valencia high school, students found the Bachiller degree title fee to be so costly that most of them did not hasten to pay it. In fact, in 1874, the high school faculty complained that 35% of those students who had passed all required exams between 1859 and 1873 hadn't obtained the degree yet because they hadn't paid the fees.

resembling that of university professors, in the sense that "in both cases the center of gravity was a professor affiliated to a particular subject" (Benso, 2002, p. 293). It is not surprising that the name chosen to name the members of the new body of secondary teachers was the same than that of their higher education colleagues—*catedráticos*. This contrasts with the case of France, for instance, where —at least initially— pedagogical aptitudes prevailed to discipline knowledge in the training of secondary teachers (Savoie, 2013, ch. 5).

In order to do so, the Pidal Plan institutionalised public competitive examinations (*oposiciones*) as the main mechanism of access to teaching roles, as this system was "less subject than others to error and unfairness, even with all flaws attributed to it".[5] Such statute established the position of *regente* —which, in turn, was divided in first or second class depending on whether the candidate had obtained a doctoral degree or not— as the basic rank in the body of secondary teachers. In order to attain such position, the candidate must have had graduated from a university and passed an examination related to the subjects they were supposed to teach. The *regente* was an interim figure, whose main purpose was to prevent situations in which a teacher, once officially appointed, stopped studying and updating his knowledge in his field of speciality with the utmost diligence. Through this system, it was only after a few years of interim exercise of teaching that the candidate could be officially named *catedrático* (Gil de Zárate, 1855, p. 65).

However, and despite the renovating intentions with which it was conceived, this system was also affected by practices that distanced it from the impartiality and adequate selection of candidates that its implementation had intended. On the one hand, many applicants had not been duly informed of the interim stage before reaching the degree of *catedrático*. On the other hand, the fact that the selection of *regentes* was made through universities, and that the Inspection Boards (*juntas inspectoras*) played an important role in the process, led to the selection on numerous occasions of candidates close to the provincial elites and not to those who had demonstrated their knowledge and merits for the position

[5] *Real Decreto aprobando el Plan General de estudios, de 17 de septiembre de 1845*, preamble.

(Sánchez de la Campa, 1874).

Indeed, the theoretical objectives of this long selection system were in line with the approaches to secondary education that were being developed in other parts of Europe. From the beginning of the century, the French *lycée* and the German *Gymnasium* laid the foundations for a state-run public centre model, the main function of which was to prepare its students for access to higher education. This model involved the need for a faculty trained at the university level and allowed to teach after passing official state exams (Anderson, 2004). The case of Prussia stands out, as it was a pioneer in the creation of specific teacher training institutions (normal schools), whose model was quickly exported to other parts of Europe and, very significantly, to the United States of America (Ramsey, 2014). In sum, the different systems of teacher selection that were put in place at the time in Europe intended the selection of teachers who, in addition to being specialists in a subject, received specific training and practised teaching in a vocational way.

The adequacy of this system to the goals aimed with the *Plan Pidal* and its capacity to select the most competent candidates is still today a matter of debate amidst historians of education.[6] The truth is that a large number of teachers were appointed as *catedráticos* through this path during the central decades of the century, and many of them would remain active and teach in important cities of the country during the second half of it. So much so that, when the *Ley Moyano* was passed, it already existed an important number of active catedráticos. In addition, demands for equalisation —especially economic— with other state official bodies increased (Laverde Ruiz, 1868). Nonetheless, with the exception of their remuneration regimes and promotion systems, *catedráticos* had not been formally declared a body of public servants.

The approval of *Ley Moyano* in 1857 did not introduce substantial changes with respect to the administrative functioning of *institutos*. As a novelty in this new statute, *institutos* were classified according to two criteria: the municipality in which they were located (article 115) and the public administration it obtained

[6] See Benso (2002, pp. 291-310). Cf. **?**, who emphasises the virtues of public competitive examinations as an efficient hiring method based on free concurrence, at least for the case of Valencia provincial high school.

its funding from (article 116).[7] According to the first criterion, those *institutos* located in Madrid would be first class; those located in provincial capitals or in those cities with university would be second class, and those located in other places would be third class. According to the second criterion, *institutos* were classified as provincial or local depending on whether their funding stemmed from provincial councils (*diputaciones*) or city councils (*ayuntamientos*). The fact of being provincial and, thus, depending financially on the provincial council, was of great importance for the newly created high schools. Firstly, because the economic capacity of the provincial institutions was, in general terms, better than that of the city councils. Secondly, because provincial *institutos* perceived, in addition to their ordinary tuition and title fees, a fraction of the tuition fees of the private educational institutions in their province, as a compensation for the tasks of supervision and inspection of these centres that provincial *institutos* were assigned. Furthermore, according to the testimonies of many *institutos* principals of the time, the nature of the personal relationships between the teaching staff and provincial representatives determined to a large extent the smoothness in the relations between both institutions, especially with reference to economic and financial matters, showing how close the interplay between teachers and public officials was in most cases (Sanz Díaz, 1985, pp. 139-143).

3.3 Sources and methodology

In order to get an aggregate picture of the secondary education endowments in Spain, the number of teachers is a more precise measure than just the number of high schools. In particular, getting at the individual teacher level we can obtain information not only about how many teachers were there in each high school, but also what subjects they taught and how experienced they were, allowing us to build a more complete picture of the situation of secondary education in the period under scrutiny. In order to obtain information at the individual teacher level, we use different promotion rosters of the body of secondary teachers (*Escalafón*

[7] *Ley de Instrucción Pública de 9 de septiembre de 1857*, articles 115 and 116.

General de Catedráticos de Instituto de Segunda Enseñanza) published by the educational administration during the second half of the nineteenth century. As shown in Table 3.1, these rosters were not published in a regular manner, especially immediately after *Ley Moyano*, and this fact was often a matter of controversy between its members, since a lack of information about one's position with respect to one's fellow teachers was an additional obstacle in a system in which promotions were very difficult to obtain *per se*. Considering the few promotion rosters that were published during the century (see Table 3.1), we use the rosters of years 1861, 1876, and 1885 so as to have a time window as long as possible within the century. Having information about these separate points in time allows us to obtain a clear picture of the evolution of the Spanish system of secondary education through its teachers in the period in which its consolidation took place after the approval of *Ley Moyano* in 1857.

Table 3.1. Secondary teachers rosters published in the 19th century.

Year	Date
1861	January 1, 1861
1876	January 1, 1876
1878	January 1, 1878
1885	January 1, 1885
1891	January 1, 1891

Source: own elaboration.

In order to show the relevance of *catedráticos* in the context of secondary education during the second half of the nineteenth century, it is useful to consider the characterisation that Cuesta Fernández and Mainer Baqué (2015, p. 362) carry out of this body of civil servants in five main points: reduced number of members with a strong gender differential, functional hierarchy, economic mediocrity, meritocratic spirit, and the sense of owning the monopoly of knowledge in their field of speciality. After the approval of *Ley Moyano* in 1857, the body of secondary education teachers became fully institutionalised, in the sense that its access systems, remuneration regimes, and a hierarchy between its members were regulated by law. Indeed, in article 210, the *Ley Moyano* established the creation of a "general promotion roster of all high school teachers in the kingdom".[8] Al-

[8] *Ley de Instrucción pública, sancionada por S. M. en 9 de Setiembre de 1857*, article 210.

though the wording of the law did not include any reference to the creation of an official body, the production of a roster for purposes of promotion "according to seniority and merit", as the norm went, has been suggested to be a proof of "corporative distinction" that equalised secondary education teachers with other renowned bodies of public servants, giving them not only a solid fit within the State's administrative structure, but also a strong corporatist personality among its members (Cuesta Fernández and Mainer Baqué, 2015, p. 358n).

In fact, this demarcation should be understood as part of the process of creation of special bodies (*cuerpos especiales*) within the Spanish public administration, the main objective of which was not only recognising the status of that staff performing duties which required a very specific training, but also guaranteeing work stability of those who were influential in certain power spheres (Jiménez Asensio, 1989). The same way judges or engineers did, secondary teachers claimed a differentiation as a result of the specificities of their training and duties. This distinction was important specially in the presence of other lower-level teaching categories, such as assistant teachers (*auxiliares*). Of course, the main difference with teaching bodies at other educational levels was determined in the salary. As stipulated in Ley Moyano, while the base salary of secondary teachers was of 8.000 *reales*, primary school teachers perceived a base salary of 2,500 *reales* (art. 191), and university professors 12,000 *reales* (art. 228). The awareness of owning a disciplinary monopoly in their field of expertise is one of the features around which this collective personality revolved. This would have important effects in the delimitation of the scope of the field, the selection of contents, or the elaboration of teaching materials as the century went by and secondary education gained prominence in society. Besides this, *catedráticos* usually participated in local cultural initiatives, most of them were close to provincial elites and usually became an important character within provincial affluent spheres (Cuesta Fernández and Mainer Baqué, 2015, p. 371). Thus, a characterisation of high school teachers allows us to know better the situation of teachers but also of education at the secondary level in Spanish provinces in the context of the consolidation of the liberal state in Spain.

3.4 Findings

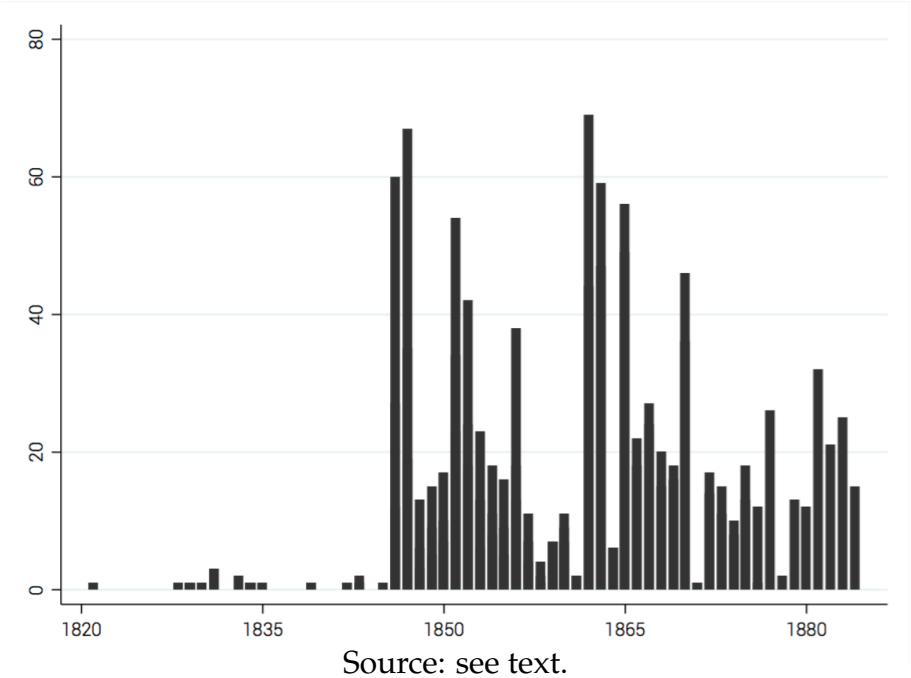
The analysis of the promotion rosters of years 1861, 1876, and 1885 allows us to obtain information about the total number of teachers in these three years: 412 in year 1861, 616 in 1876, and 601 in 1885. Regarding the yearly incorporation of teachers, the number of teachers joining the body suffered a dramatic increase after 1845, when *Plan Pidal* was passed, for obvious reasons, as illustrated in Figure 3.1. After that moment, the number of teachers accessing the body is consistently higher than before 1845, although with large fluctuations between years. This reinforces the idea that *Plan Pidal* was the legal landmark actually consolidating secondary education in the context of the construction of the liberal state in Spain, at least with respect to the public servants who were meant to implement the changes in this realm. Once *Ley Moyano* was passed, *catedráticos* who joined the body were distributed in sections according to the *numerus clausus* system stipulated in article 210. This division was meant to establish different remunerations for teachers according to their experience with respect to their colleagues. All active teachers were divided into four sections with a maximum number of teachers in each of them. The first section should be formed by a maximum of 30 teachers; the second one, by a maximum of 60; the third one, by a maximum of 120; and the fourth one did not have a limit on members.[9] Each teacher's monthly wage was then formed by two items: the base wage and the section complement. The base wage was determined by the category of the high school where a teacher was posted. The section complement, also called *premio de escalafón* (hierarchy prize) (Sanz Díaz, 1985, p. 116), implied a salary increase when a teacher was promoted to the next section in the roster. In particular, being posted in an *instituto* categorised as in the fourth section did not lead to a complement; the third section had a complement of 2,000 *reales*; the second section had a complement of 4,000 *reales*, and the first section had a complement of 6,000 *reales*.[10]

In theory, under such scheme of sections with maximum number of mem-

[9] *Ley de Instrucción Pública de 9 de septiembre de 1857*, article 210.

[10] *Ley de Instrucción Pública de 9 de septiembre de 1857*, article 210.

Figure 3.1. Number of teachers joining the body yearly from 1820 to 1885.



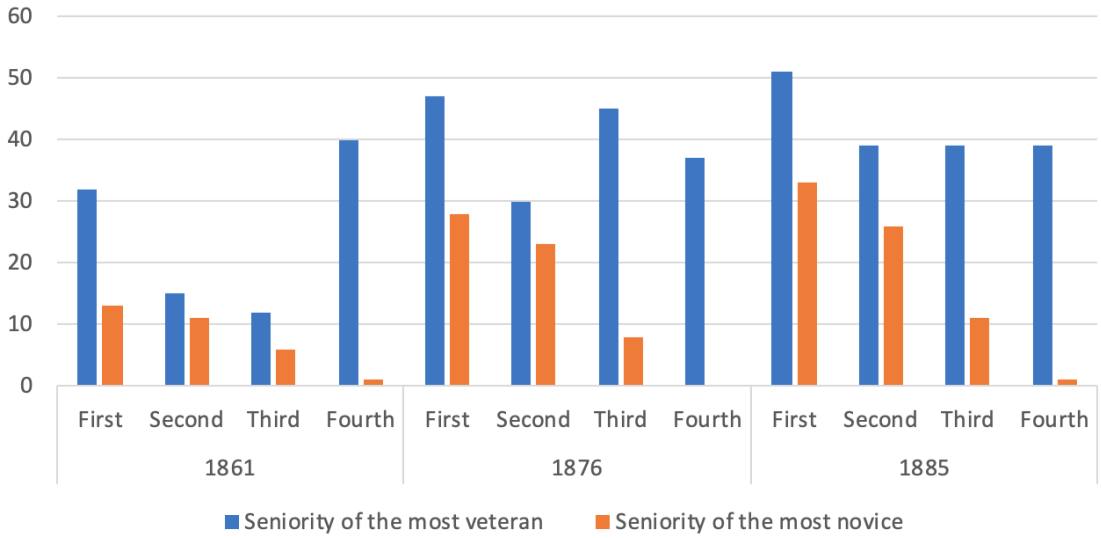
Source: see text.

bers, achieving high remuneration levels was actually very difficult, because being promoted to an upper section implied the release of seats through the retirement or death of teachers belonging to them. However, promotion to upper sections was not an automatic mechanism that acted in parallel with years of experience. Article 232 stipulated that the promotion to upper sections would be recommended by the government considering the merits and services that the teacher under consideration had performed "with the publication of works and other literary or scientific works", but always respecting the experience of individuals in the body.[11] Thus, there was an economic incentive for teachers to maintain their intellectual activity during the exercise of their functions. In this respect, Figure 3.2 illustrates the number of years elapsed since joining the body for the most and the least experienced teacher in each of the sections of the different rosters. As we can see, the years of experience of the most experienced teacher follow a very different pattern than those of the most novice teacher. In fact, for years 1876 and 1885, the experience of the most veteran teacher remains constant at around 40 years for all four sections, while the experience of the most novice teacher increases progressively with the section. In year 1861 this pattern

[11] *Ibid.*, article 232.

is not so clear, although the seniority of the most veteran teacher in the fourth section is actually higher than the seniority of the most veteran in the first one. This shows how some teachers with a number of years of experience that would have allowed them to be in upper sections chose to remain in lower sections of the hierarchy instead.

Figure 3.2. Seniority (in years) of the most and the least experienced teacher by sections of the rosters.



Source: see text.

This particular phenomenon was not an individual-specific situation, but rather several teachers found themselves in such a situation. For instance, the first teacher in the 1876 roster, Francisco Claret y Barrera, teacher of Trade Arithmetic in Barcelona, who joined the body in 1831, was positioned in the third section although he had 45 years of service. Similarly, Francisco Anglada y Reventós, teacher of French also in Barcelona, joined the body in 1839 but was positioned in the fourth section in 1876 after 37 years of service (Elías de Molins, 1889). In the same roster, there are 21 teachers who joined the body in 1846 and were positioned in the third and fourth sections. In the 1885 roster, we find six teachers who joined the body in 1846 and were positioned in the third and fourth sections after 39 years of service.

There are several possible explanations for this phenomenon. The first and most obvious one is that, once they had obtained tenure as *catedráticos*, some pro-

fessors may have lost interest in striving to carry out intellectual activities that could be recognised as merits for promotion. Thus, they chose to remain in lower sections even if that meant earning a lower salary. Secondly, it may have been the case that teachers in this situation had taken leaves of absence since they joined the body and, thus, did not actively serve during all the period, reducing their actual possibilities to be upgraded *vis-à-vis* other fellow *catedráticos* who had been active continuously. Thirdly, it is also possible that, once posted in a particular high school that was interesting for them, whether it was due to its location in a particular city or because of the prestige of the school or the discipline, teachers stopped striving to get a promotion and, thus, ceased being interested in achieving upper sections.

With regard to the subjects taught, Table 3.2 illustrates the number of teachers by their subjects of speciality in the different rosters, as well as the percentage each group represents with respect to the total number of teachers. The analysis of the variations in the number of teachers of each subject reveals some interesting patterns. Teachers of compulsory and basic subjects, such Latin and Spanish or Mathematics, represent the largest faculty group in all three rosters, with its teachers being between 15 and 21% of the total number of instructors. Other subjects which were compulsory at certain levels also have an important representation in all three rosters, such as Physics and Chemistry, Natural History, Geography and History, or Rhetoric and Poetics, with between 6 and 11% of all teachers.

Subjects related to industrial training deserve specific mention. One of the most important provisions of *Ley Moyano* affected the relationship between general studies and industrial training. Specifically, article 12 stated that industrial training should be taught in high schools, along with general secondary education courses,[12] restraining the expansion of centres of industrial training as independent entities from high schools (Lozano López de Medrano, 2014). Likewise, the law merged second and third level studies into a single curriculum which

[12] *Ley de Instrucción Pública de 9 de septiembre de 1857*, article 12

Table 3.2. Evolution of the distribution of teachers by subject, 1861–1885.

Subject	1861		1876		1885	
	N	%	N	%	N	%
Agriculture	1	0,24	12	1,95	35	5,84
Cosmography and piloting	-	-	2	0,32	1	0,17
Applied chemistry	1	0,24	4	0,65	5	0,83
Industrial mechanics	-	-	3	0,49	3	0,50
Trade arithmetic	11	2,67	8	1,30	10	1,67
Geography and industrial and commercial statistics	8	1,94	1	0,16	1	0,17
Political economy and commercial law	11	2,67	10	1,62	12	2,00
Geography and commercial law	1	0,24	-	-	-	-
Physics and chemistry	31	7,52	54	8,77	54	9,02
Mathematics	61	14,81	121	19,64	112	18,70
Natural history	27	6,55	52	8,44	51	8,51
Art	5	1,21	23	3,73	17	2,84
Arithmetic and algebra	3	0,73	-	-	-	-
Psychology and logic	12	2,91	57	9,25	59	9,85
Logic and ethics	33	8,01	2	0,32	8	1,34
Rhetoric and poetics	37	8,98	62	10,06	63	10,52
Latin and Spanish	84	20,39	103	16,72	91	15,19
Geography and history	37	8,98	58	9,42	49	8,18
Religion and moral	9	2,18	1	0,16	-	-
Latin and Greek	13	3,16	1	0,16	-	-
English	6	1,46	9	1,46	10	1,67
French	21	5,10	32	5,19	18	3,01
Italian	-	-	-	-	1	0,17
German	-	-	1	0,16	1	0,17
Total	**412**	**100**	**616**	**100**	**601**	**100**

Source: see text.

could now be studied in cities where industrial schools had existed, as they had been turned into superior ones. Thus, high schools became provincial referents of intermediate education knowledge, whether it was in pure or applied disciplines. This situation would abide for around a decade, until 1869, when the *Sexenio Revolucionario* (1868–1874) allowed city and provincial councils to freely establish educational centres at will. In practical terms, this meant that high schools should accommodate both types of education and, thus, that teachers of applied subjects were not going to be considered separately from secondary teachers. That is why we find a progressive increase in the number of teachers of subjects related to industrial training, such as Industrial Mechanics, Cosmography and Piloting, Applied Chemistry, or Art.

Among the most apparent, we find the case of Agriculture, which went from just 1 teacher in 1861 to 12 in 1876 and almost tripled this number in the years between 1876 and 1885. Agriculture is also an interesting case considering that for most of the 19th century Spain was mainly an agrarian country. Thus, this trend can be looked at from the light of the consolidation of the agronomical profession in Spain, that mainly took place after the creation of the body of agricultural engineers in 1855 and, especially, after the Central School of Agriculture was moved to Madrid in 1869 (Pan-Montojo, 2007). During the decades that followed, the conditions of agricultural activity in Spain changed drastically, mainly due the entrance of national products in the world market and the incidence of plagues. As some authors have argued, the need to adapt to the new situation brought with it an important boost to research and teaching in the field of agriculture both in the form of new public institutions and settling pre-existing initiatives all over the country.(Calatayud Giner, 1985; Cartañà et al., 2004). In the case of secondary education, this translated into the fact that Agriculture was made a compulsory subject in all secondary studies (Cartañà Piñén, 2005). The sharp increase on the number of secondary teachers during this period suggests that this consolidation of the agronomical profession was also translated into the realm of secondary teachers. As evidenced not only by Agriculture but also by the rest of subjects related to industrial training, there is evidence suggesting that secondary education was somehow responding to the structural changes that were taking place in the Spanish economic and social life in terms of endowing chairs of disciplines that could be useful from an economic perspective.

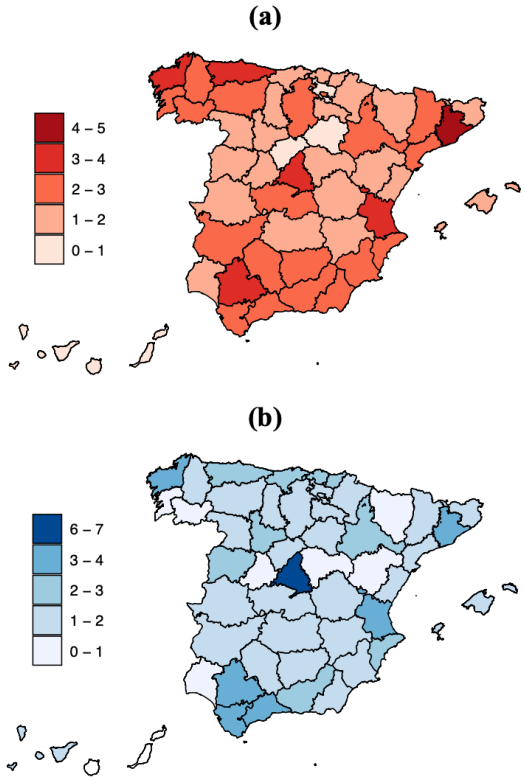
Another important provision of *Ley Moyano* allows us to discover one of the, at least theoretically, most compelling features of the new system of secondary education, in which industrial training was embedded: geographical specialization. Article 122 stated that "... high schools should lay down those applied studies which are more suitable considering the characteristics of the municipality".[13] In other words, the central government was recognising the usefulness of the type of knowledge taught in high schools in the promotion of economic activity. What is more, the government was making the case for curricular specialisation so that

[13] *Ley de Instrucción Pública de 9 de septiembre de 1857*, article 122.

local schools could train their students in those subjects that could be useful in local businesses, factories, and other productive structures. In fact, there existed numerous examples of high schools which conducted some degree of curricular specialisation that met the characteristics of industrial activity in different areas, especially in regions with higher economic dynamism, such as Catalunya, Asturias, Andalucía, and Valencia (Lozano López de Medrano, 2014).

Figures 3.3 to 3.8 display the spatial distribution of secondary teachers of certain subjects for the three different rosters. Apart from the provincial shares of population and the provincial share of secondary teachers, four subjects representative of specific fields of knowledge have been chosen, namely Latin and Spanish, Mathematics, Agriculture and French.

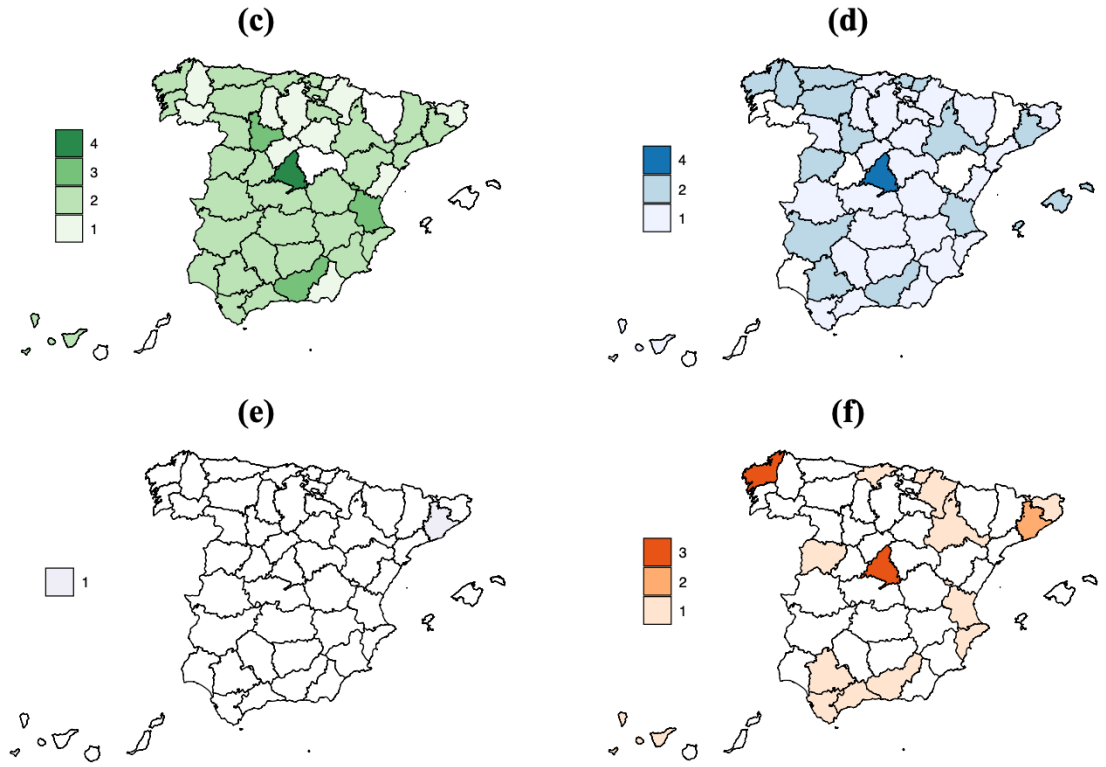
Figure 3.3. Spatial distribution of teachers in 1861.



Note: (a) Share of population by provinces (in %); (b) Share of secondary teachers by provinces (in %). **Source:** see text.

In Figures 3.3 and 3.4, corresponding to the 1861 roster, it is interesting to see that with the exception of Madrid, provinces with the largest share of teachers are located in the periphery as opposed to Castilian provinces. It is important to

Figure 3.4. Spatial distribution of teachers in 1861 by subjects.



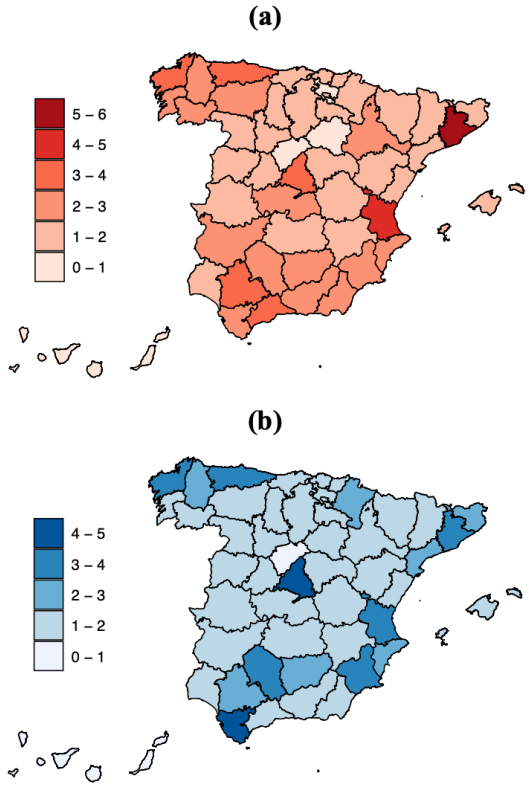
Note: (c) Number of teachers of Latin and Spanish; (d) Number of teachers of Mathematics; (e) Number of teachers of Agriculture; (f) Number of teachers of French. **Source:** see text.

point out that in 1861 Madrid was the only province with two independent high schools, *Instituto de San Isidro* and *Instituto del Noviciado*, both located in the city of Madrid. Latin and Spanish had a fairly constant distribution of teachers among its provinces, although in Huesca, Guadalajara, and Las Palmas there were no teachers at all. With regards to agriculture, there is only one teacher who is located in Barcelona. The distribution of French teachers is also an interesting case, since it is a subject that is still being implanted throughout the territory. As we can see, the first provinces where there are French teachers are mostly located in the periphery.

Figures 3.5 and 3.6 correspond to the 1876 roster and portray a more fully implemented system of secondary education. Not only the number of teachers increased at the national level, but also core subjects such as Latin and Spanish and Mathematics have now a much more solid deployment throughout all provinces. Even so, we still find that provinces with a larger share of teachers are located

in the periphery. Between 1861 and 1876, however, new high schools had been created in provinces where there was already one.[14] Thus, the number of teachers by province represents the teachers in two or more high schools, usually in provinces where the most populated city, the most important in economic terms, or the most socially diversified did not coincide with the capital. This was the case of Alicante, with high schools in Alicante and Alcoy; the Balearic Islands, in Palma and Mahón; Cádiz, in Jerez and Cádiz; Córdoba, in Córdoba and Cabra; Coruña, in Coruña and Santiago; Girona, in Girona and Figueres; Jaén, in Jaén and Baeza; León, in León and Ponferrada; Murcia, in Murcia and Lorca; Navarra, in Pamplona and Tudela; Asturias, with Oviedo, Gijón and Tapia; Salamanca, in Salamanca and Béjar; Sevilla; in Sevilla and Osuna; Tarragona, in Tarragona, Reus and Tortosa; and Valencia, in Valencia and Xàtiva.

Figure 3.5. Spatial distribution of teachers in 1876.

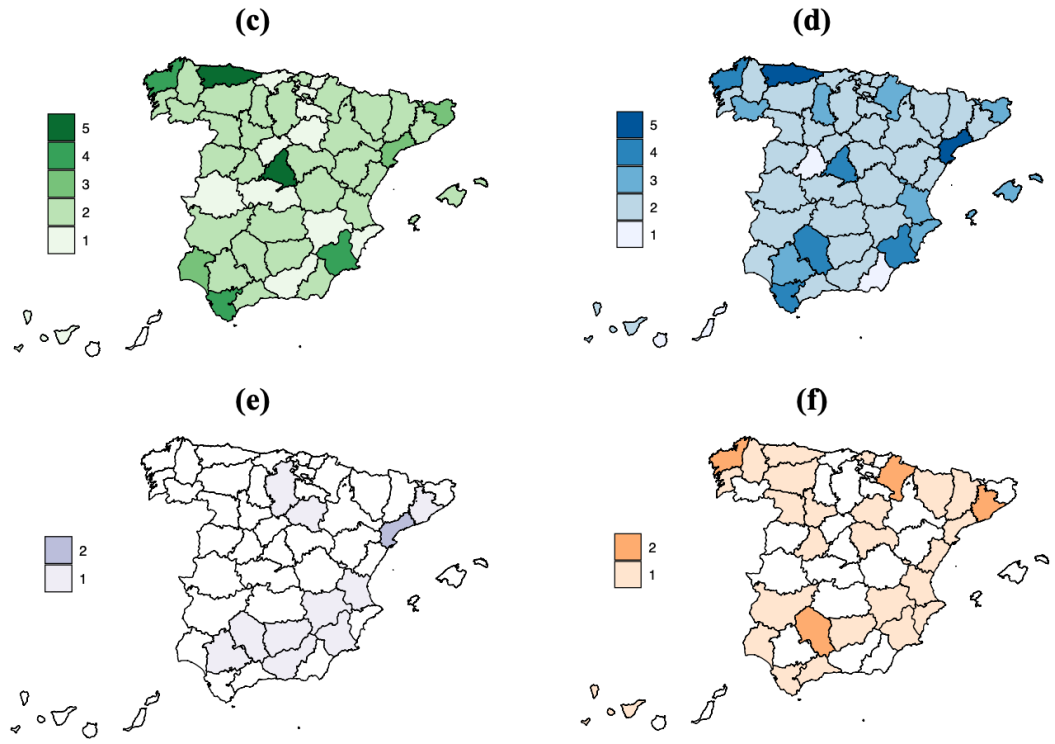


Note: (a) Share of population by provinces (in %); (b) Share of secondary teachers by provinces (in %). **Source:** see text.

As a result, the pattern we see in the map of total number of teachers becomes

[14] For a chronology of the creation of high schools, see Viñao Frago (1982, pp. 397-406)

Figure 3.6. Spatial distribution of teachers in 1876 by subjects.

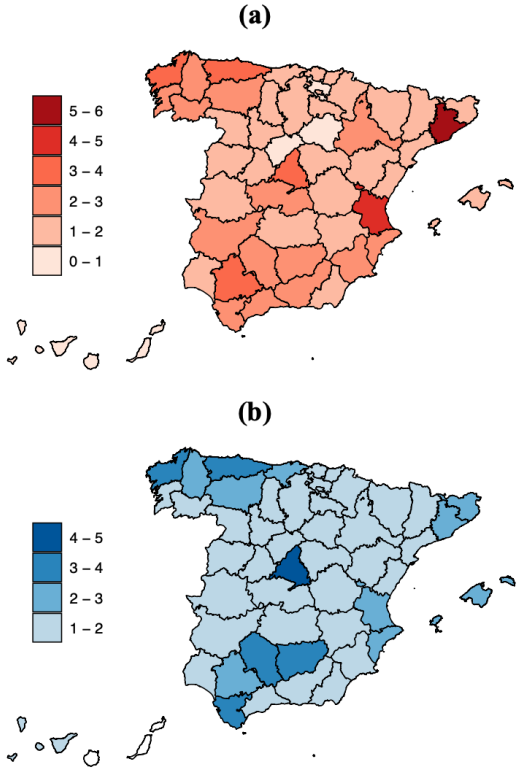


Note: (c) Number of teachers of Latin and Spanish; (d) Number of teachers of Mathematics; (e) Number of teachers of Agriculture; (f) Number of teachers of French. **Source:** See text

clear: provinces with more than one high school have more teachers. This indicates that there was no competition between different high schools in the same province, but rather all high schools in a province were endowed equally. In Agriculture, however, we do not observe such a pattern. Madrid, for instance, does not have a teacher of Agriculture, while most of Andalusian and Mediterranean provinces do. With regards to French, the only provinces with two teachers are Navarra, Barcelona, Córdoba, and Coruña. With the exception of Barcelona, all of them have two high schools and, thus, one teacher per high school. Madrid, for instance, does not have any French teacher.

The situation of the 1885 roster is illustrated in Figures 3.7 and 3.8. As we can see, in 1885 the general situation of the previous roster consolidates, with most of the teachers posted in Madrid and in peripheral provinces. Considering the division by subjects, we see how the distributions of Latin and Spanish and

Figure 3.7. Spatial distribution of teachers in 1885.



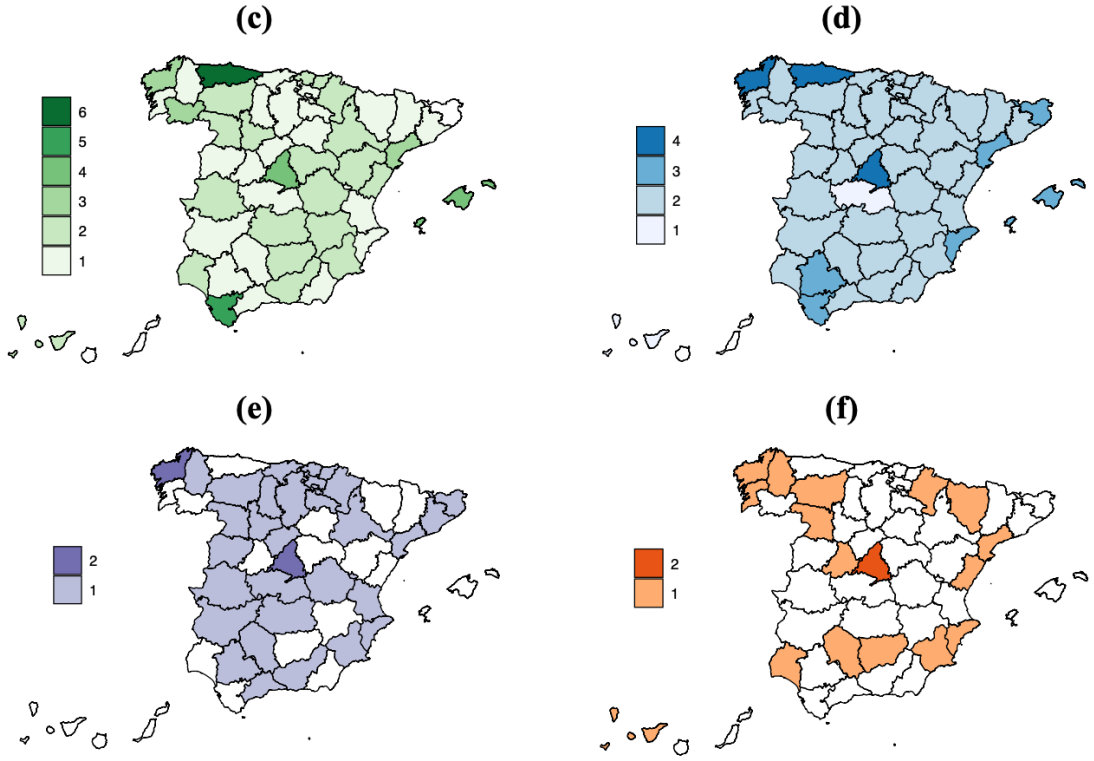
Note: (a) Share of population by provinces (in %); (b) Share of secondary teachers by provinces (in %). **Source:** see text

Mathematics teachers are very similar, which is what we would expect for two basic and compulsory subjects in a consolidated system. The image in Agriculture has changed remarkably, since now most Spanish provinces have at least one Agriculture teacher, with two of them only in Madrid and Coruña. As for French, the total number of teachers has decreased given the increasing importance of English as a foreign language. The distribution, however, is similar to the one we found in 1876: peripheral provinces have a larger number of teachers as opposed to Castilian provinces.

3.5 Conclusions

Until now, there had not been a systematic exploration of 19th-century promotion rosters of secondary teachers in Spain. The analysis of promotion rosters between the years 1861 and 1885 provides new evidence about the professional character-

Figure 3.8. Spatial distribution of teachers in 1885 by subjects.



Note: (c) Number of teachers of Latin and Spanish; (d) Number of teachers of Mathematics; (e) Number of teachers of Agriculture; (f) Number of teachers of French. **Source:** see text.

istics of the body of secondary teachers. The number of teachers grew considerably after the system of secondary education was unified with the approval of *Plan Pidal* in 1845. Although the intakes by year fluctuated, the total number of secondary teachers in Spain grew from 1861 to 1876, although it stabilized during the Bourbon Restoration up to 1885. Given that this was a period of intense social changes, political instability, and the succession of different regimes, the fact that teachers continued to be hired in a constant manner makes clear that the body enjoyed a high degree of institutionalisation within the Spanish administration.

This evidence goes in line with the consolidation of secondary education within the Spanish education system during the period, both because of the increase in the number of students and, in a first stage, of the increase in the number of subjects to be taught with the inclusion of applied studies subjects. If we turn to the years of experience of the teachers in each section of the rosters, we find striking results. Although the years of experience of the least experienced teach-

ers do follow a pattern coherent with the hypothesis that upper sections may require higher experience, the years of experience of the most veteran teachers are consistently high, indicating that not all experienced teachers ended up being promoted to upper sections, probably because once they obtained the position they did not achieve the necessary merits to be promoted. Thus, the system encouraged the intellectual production of teachers while they held their chairs but did not penalize those who chose not to keep accumulating merits.

With regard to subjects, the most prominent subjects in terms of total number of teachers were those that had a general and compulsory character, as we would expect since they were the ones with a larger number of students and, thus, with more teachers needed. In addition, these were fairly uniformly distributed among the territory, which confirms that the implementation of the general curriculum throughout the public network was carried out effectively and relatively quickly during the two decades that followed the approval of the *Ley Moyano*. Beyond the subjects belonging to the general curriculum, we also observe an increase in the number of teachers specialized in applied subjects. This is consistent with the legislative changes introduced after *Ley Moyano*, that stipulated the inclusion of applied studies within general high school syllabi. This is an interesting first finding and further analyses in this regard could contribute to deepen our understanding of the relationship between secondary education and the consolidation of scientific disciplines and its difussion throughout Spanish provinces in 19^{th}-century Spain.

The analysis of secondary education teachers provides a positive image of the development of the Spanish secondary education system during the second half of the 19^{th} century. Although, as seen in the previous chapter, secondary education failed to significantly increase the number of students, the years that elapsed between the approval of the *Ley Moyano* and the turn of the century served to establish and consolidate some aspects of the recently created educational stage through the public network of high schools. Specifically, public high schools were progressively endowed with qualified teaching personnel belonging to a specific civil service body, so that all Spanish provinces had teachers in the basic sub-

jects of the curriculum and many of them also teachers specialized in applied subjects. However, the fact that the number of public high schools hardly grew during the second half of the century, maintaining the criteria imposed in the *Plan Pidal* by which there would only be one public high school for each provincial capital, prevented this teaching body professionalized and with a presence in the provinces had a clear effect on enrollment. In the next chapter we study a hypothesis through which the particular institutional structure of the network of public centers could have made access to secondary education difficult for a large part of the Spanish population, thus explaining part of the low enrollment figures recorded.

Chapter 4

Spatial inequality of opportunity in access to secondary education in 19^{th}-century Spain

4.1 Introduction

As pointed out in the Introduction, the next step after the historical reconstruction of the network and its endowments must be the development and validation of hypotheses that can explain the trajectory of the Spanish secondary education system as observed in the figures. As we saw in Chapters 2 and 3, the growth of the secondary education network in Spain between the approval of the *Ley Moyano* and the beginning of the 20^{th} century is mostly a story of failure. From the perspective of students, it was a failure in absolute terms, if we look at the total number of students; failure in relative terms, if we look at gross enrollment rates; and, focusing exclusively on the network of public high schools, a failure in the sense that the public network lost most of its students in favor of the flourishing network of private schools, mostly linked to the Catholic Church. Chapter 3 has shown that the consolidation of the body of secondary school *catedráticos* and the progressive professionalization of its members occurred relatively quickly, but this transformation of the teaching class was limited to existing public high

schools which, as we know, were scarcely increased in number during the entire second half of the 19th century. But, what caused this sluggishness in secondary education during the second half of the 19th century?

In this chapter, we develop and try to validate a hypothesis on the sluggishnes of secondary education that is related to the supply of education. We delve into the potential effects that the spatial distribution of high schools may have had in the popularization of the educational stage by preventing its access to a large majority of the population, who mostly lived in rural areas far from the provincial capitals, where the schools were located. In other words, we explore the spatial distribution and scant number of high schools during this period was a source of inequality of opportunity in access to secondary education and, therefore, a brake that would explain the low numbers of students and enrollment that we observe in the whole of Spain.

Of course, our hypothesis is not intended to establish itself as the only —or even the main— explanation of the phenomenon and it is perfectly compatible with other possible causes, which could have occurred concomitantly. For example, it would be ridiculous to deny the role played by low literacy rates observed in the Spanish provinces during the second half of the 19th century, since literacy —and, more specifically, passing primary school— was a *sine qua non* requirement for access to secondary school. However, given that the literacy figures of the Spanish provinces and municipalities during this period, as well as their role in the backwardness in the accumulation of human capital in Spain, are issues that have already been widely discussed in the literature (Beltrán-Tapia et al., 2019; Núñez, 1992), we will not dwell on them. This article tries to complement this literatura by exploring if there were further factors that imposed limits on the development of the secondary education system during the 19th century.

We hypothesize that the institutional structure of the Spanish secondary education system hindered access to secondary schools to most students and, thus, was unable to reach the majority of the population in equal conditions. We introduce the concept of away-from-knowledge (AFK) areas to broadly define those places that were geographically and socially isolated from knowledge and edu-

cation and, thus, were a source of inequality of opportunity in access to education for those who grew up in them. In this regard, the questions we intend to solve are several: What difficulties did students wishing to pursue secondary education face? How did the structure of the secondary education network influence students' decision to pursue their studies?

In the following pages, we will argue that the number of public high schools and the way they were distributed in space prevented a significant part of the population from attending this stage, or at least made it more difficult for them to succeed. To support our claim, we propose using a new historical source on the Spanish secondary education system for the second half of the 19th century. Considering the new data obtained from said source, the use of high school graduation age is proposed as an effective measure of the social, familiar, and economic difficulties that students had to face in order to get an education, both during its primary and secondary studies.

To do so, we first provide qualitative evidence supporting the accuracy of this measure for such purpose. Our results show that students from non-urban contexts bore larger costs to study than those coming from cities and that the size of this effect is increasingly larger for those students who graduated at an older age, that is, those who arguably bore larger personal costs to acquire education. In other words, students coming from small municipalities in 19th-century Spain faced larger costs to study secondary education and, thus, inequality of opportunity in access to secondary education existed during the period, which which prevented the number of students and, with it, the gross enrollment rate from growing.

The remainder of the chapter is organized as follows. In Section 4.2, I provide a brief historical context on the characteristics of the Spanish secondary education system, relating the spatial characteristics of the public network of secondary schools with the distribution of the population between urban and rural areas. Section 4.3 introduces *Bachillerato* graduation age as a way of approximating the cost of acquiring education, providing several arguments to justify its adequacy within this historical context, highlighting its potential uses in historical research.

Section 4.4 thoroughly describes the historical sources used and discusses its potential limitations. Finally, Section 4.5 describes the empirical strategy used to anlayze the data, shows the main results and discusses its usefulness in the context of the research question posed, while Section 4.6 concludes.

4.2 Secondary education in Spain and away-from-knowledge (AFK) areas

In 19th-century Spain, one of the main differences between secondary and primary education was the characterization of their school networks. The concern to extend the primary school network materialized in the *Ley Moyano* through the provisions aimed at regulating the number of schools in each municipality considering its population. Municipalities larger than 500 inhabitants had to have at least one school for boys and another for girls, although the latter could be smaller and have less classes. Such a 'municipal' approach to education supply policy was not followed, however, in the case of secondary education. In fact, the implementation of the public high school network was characterized, throughout the 19th century and much of the 20th, by the model emerged from the Pidal Plan (1845), which established that public high schools were to be located in provincial capitals only.

In these circumstances, a process of extension of private secondary education —in most cases related to the Church— began in municipalities where the public network was not present, but that could nevertheless host demand for this level of education, either due to population growth, literacy levels or because they were the seat of administrative institutions, such as capitals of judicial districts, as we will show in Chapter 5. The relevance of this institutional architecture was accentuated by the fact that, although it was possible to study secondary education in private schools, public high schools maintained the monopoly of proctoring exams and issuing the Bachiller degree until 1885 (Díaz de la Guardia Bueno, 1988). In this way, a student who wanted to complete his high school studies had

to maintain a certain contact, even if only through examinations and administrative procedures related to enrollment or application for the degree, with one of the public high schools and, therefore, with at least one of the provincial capitals. The same was true for vocational training that, despite not yet enjoying a large territorial implantation, also had to be taken in institutos, as they constituted a separate branch of secondary education studies (Lozano López de Medrano, 2014).

However, most of the Spanish population in the second half of the 19th century still lived in rural areas. Although the proportion of population living in provincial capitals grew slowly during the second half of the century (Table 4.1), residents living in other municipalities were never less than 80% of the total population at any time during the century (Erdozáin Azpilicueta and Mikelarena Peña, 1996). Thus, for most of the 19th century the decision to pursue secondary studies meant, for a large percentage of the Spanish population, having to move to larger municipalities where public or private secondary schools were located. In this way, the decision to undertake secondary studies implied in most cases the decision to migrate to a different municipality, with all the difficulties that this entailed in economic but also familiar, cultural, and social terms.

Table 4.1. Population living in provincial capitals and in other municipalities, 1877-1900

	Provincial capitals		**Elsewhere**	
	Population	**%**	**Population**	**%**
1877	2,453,565	14.7%	14,283,299	85.3%
1887	2,746,062	15.6%	14,902,312	84.4%
1900	3,162,509	16.8%	15,644,115	83.2%

Sources: Population Censuses.

In the same way that the expansion of knowledge was fundamental for the development of the Industrial Revolution in Europe through a top-down mechanism in which knowledge institutions in a broad sense acted as a driving force (Dowey, 2017; Mokyr, 2004), a small educational network concentrated in space had a reduced capacity to drag society by transmitting its objectives and benefits to its citizens, and therefore a low power of social influence that would be reflected, for example, in family decisions on children education. This would

be particularly relevant in non-urban contexts where the presence and influence of educational institutions was notably lower and, therefore, the awareness of its residents about the role of education and its usefulness presumably was much lower than in urban environments, where cultural institutions were more established and knowledge-diffusion activities found a more favorable context (Dittmar, 2019). In fact, cities are privileged environments for the generation of innovation and culture (Scott, 1997), and phenomena of creative agglomeration occur within them analogously to what happens with economic activity (Jacobs, 1969; Florida, 2002).

Even though it has been shown that agglomeration economies did not appear in Spain until the beginning of the 20th century linked to the process of structural transformation of the Spanish economy (González-Val et al., 2017; Beltrán Tapia and Martinez-Galarraga, 2018), it can be argued that there existed a sort of cultural agglomeration around the provincial capitals, which were also the largest municipalities in terms of population, since cultural institutions such as secondary schools, libraries or athenaeums were concentrated in them (Ruiz Berrio, 2008; Bartolomé Martínez, 1989; Villacorta Baños, 2003), and all of these institutions were points of contact for the provincial elites. This fact was already observed in the 19th century by intellectuals linked to the *Institución Libre de Enseñanza (ILE)*, an institution that became a major pressure core in favor of cultural spreading and pedagogical renewal. They argued that the problem was not only the inability for many students to effectively access schooling, but also the lack of contact with culture and education, which prevented large parts of the population from understanding, for instance, the implications of receiving an education and how useful it could be in their future life. As pedagogue Manuel Bartolomé Cossío (1858-1935) put it,

> The child of the city has, gentlemen, the newspaper, the theater, the cultured conversation of the atmosphere that surrounds him, the museums, a permanent exhibition in the windows of each store; *but the poor country boy, where can he ever see a statue? Who will tell him that there has been a Shakespeare or a Velázquez? Who will make him feel the beauty of*

> *a melody by Mozart, a verse by Calderón or an Eco nacional by Ruiz Aguilera? Who will excite him to raise his eyes from the land that he may already be cultivating next to his parents? Who will urge him to think, reflect on something that is not bodily? Who will ever call his attention to the pleasure that comes from reflection?* ([emphasis added] Congreso Nacional Pedagógico (1882) quoted in Tiana Ferrer (2021))

The situation described by Cossío illustrates the situation in much of the Spanish countryside and is a good example of what we will refer to as an away-from-knowledge (AFK) context. But beyond the cultural isolation implied by the lack of cultural institutions and resources, the characteristics of 19th-century rural household economies is essential to understand this phenomenon, considering the prominent position that child labor still occupied in the Spanish economy during the 19th century (Borrás Llop, 2013). Not only child labor introduced important distortions in the normal development of the schooling process, but also the economic needs that impelled parents to employ their children could also create in them a negative predisposition in families towards instruction and culture in general, such as considering that reading and writing were not necessary for agricultural work or not understanding why their children had to learn something they had never needed themselves (Ruiz Rodrigo, 2013).

This context allows us to formulate a theoretical concept that can be useful in the historical analysis of educational inequalities — away-from-knowledge (in short, AFK) contexts. Formally, I define away-from-knowledge contexts or areas as those in which the obstacles to access education are large due to the absence of educational centers and, as a result, little if any contact with knowledge, culture and, in general, any activity not related to manual work. Being away-from-knowledge implies an initial deficiency in the educational supply that causes population getting increasingly distanced from education and, consequently, a subsequent decrease in educational demand. From this perspective, the main problem of away-from-knowledge areas lies not only in the absence of educational centers but also in the ignorance of its inhabitants regarding instruction and its potential benefits for the improvement of their living conditions. In fact,

the situation of extreme backwardness in the Spanish countryside, in contrast to the situation in the cities, was one of the main motivations that led to the launch of popular education initiatives such as the Misiones Pedagógicas during the first third of the 20th century (Tiana Ferrer, 2021).

4.3 Graduation age and the obstacles to study

The first step in showing that there existed differential trajectories in access to secondary education is finding a reliable way to measure the obstacles students had to face to be able to study and graduate. We argue that the age of secondary education graduation (in the case of Spain, obtaining the *Bachiller* title) is a good measure for this purpose. In fact, the study of graduation age from a historical perspective already has some antecedents. Martín Jiménez (1994) is, to the best of our knowledge, the first study to consider graduation age in secondary education as a source of individual students' personal information. He attributes the existing variation to two main factors: the intrinsic delay in completing secondary studies and the age of access to secondary education, which is fundamentally determined by the completion of primary studies. While these factors are true, we enhance his argument by showing that several other characteristics that, taken together, make graduation age a good variable for approximating the obstacles students had to face to undertake secondary education studies.

The first factor to consider is the prevalence of child labor in the Spanish economy during the 19th century (Borrás Llop, 2013), as pointed out earlier. The importance of child labor in determining the obstacles that students had to face when going to school is fundamental for two reasons. The first of these, which has already been pointed out above, has to do with the negative predisposition of families to spend time and resources on something that in their opinion had no practical use, such as education. The second of them, and probably the most decisive, has to do with the practical decisions of reallocating family resources (money, but also time) to accommodate the children's schooling. The precarious economic situation in much of 19th-century rural Spain made it necessary for chil-

dren to participate in the labor market from an early age in order to supplement the battered family incomes, either through additional wages or because they could constitute free labor, especially in agricultural tasks (Ruiz Rodrigo, 2013). In this regard, and as Humphries (2010, p. 317) has pointed out, in the context of such precarious household economies the opportunity cost of going to school was much greater than the monetary cost of school itself. In this context, school trajectories could be significantly lengthened by interruptions caused by the need to enter the labor market, even if it was a temporary situation. Closely related to the above, it is important to note that secondary education was not compulsory at the time.

According to *Ley Moyano*, only primary education from 6 to 9 year-olds was to be compulsory, so that secondary and university education remained as non-compulsory educational stages. In fact, there were numerous debates at the time about the appropriate age of access to secondary school since some families did not agree with the imposition of a minimum age of access. However, teachers considered that imposing no minimum age would force them to reduce the academic level during the first years of high school, what they considered utterly unacceptable. In 1880, the age requirement of being 9 years old imposed by the *Ley Moyano* to access *Bachillerato* was eliminated and passing the entrance exam became the only requirement (Macías Picavea, 1882, p. 112-113).

As Sirera Miralles (2011, p. 49) has explained, during the 1859-1880 period "access to high school was not exactly delimited, since there was no synchronization in matters such as compulsory schooling and the duration of the school period was incompletely regulated." In fact, he shows that in the case of the Valencia high school, 37% of the students in that period accessed Bachillerato with more than 14 years, a fact that he relates to "the usual lag in the school timing in primary school", but also with the fact that "young people inserted in the labor market joined high school hoping to improve their personal training." In this sense, this phenomenon can also be related to "the practice of forced savings by families, necessary to pay for their studies." (Sirera Miralles, 2011, p. 49). In fact, Sirera identifies the increase in the percentage of students who entered with less

than 14 years of age from 1880 with "the normalization of the schooling processes that standardized, to a certain extent, the academic and biological evolution of the students, as well as by the consolidation of the degrees created with the Moyano Act" (Sirera Miralles, 2011, p. 51). Thus, Sirera concludes, the fact that the *Bachillerato* attracted students of different ages, especially in the period before the Restoration, should be understood as a sign of the attraction that the educational stage exerted on population sectors beyond the affluent classes and higher entry ages indicated heterodox life trajectories in which difficulties to access education existed.

On the other hand, secondary education was initially conceived to be taken as a modular stage. The *Ley Moyano* proposed an enrollment procedure characterized by the choice of individual subjects and not by blocks of complete courses, as evidenced by the articles referring to enrollment procedures and payment of fees. In the 1859 syllabus regulation it is specified that, among the documents that the students had to deliver to the center to enroll, it should be indicated "which subjects they intend to study in the course".[1] In systems with a modular curriculum, each academic year is divided into independent subjects that, however, do not require a positive joint evaluation to move on to the next course. In fact, there are usually no joint enrollment requirements, so that the student can go through the different subjects that make up the curriculum following the plan or configuring their own itinerary according to their own personal circumstances or financial possibilities.

The literature has pointed to the existence of a relationship between a modular curriculum and lower dropout rates in secondary education (Pilz et al., 2018). According to Mazrekaj and De Witte (2020), there are several mechanisms that may explain this relationship: greater flexibility of the system, which can lead to greater motivation to complete the stage; the positive feedback that the student receives when passing several subjects separately; a modular system may be less demanding for the student, having to face subjects that involve smaller, short-term objectives; among others (De Witte et al., 2013). These effects would lead to

[1] *Reglamento de segunda enseñanza de 22 de mayo de 1859,* article 133.

a lower dropout rate but with a lower number of subjects per year, which would explain an increase in the age of completion of studies. This was actually the case in the Spanish secondary education system during most of the 19th century, as enrollment in complete blocks of courses would take time to prevail, and enrollment by individual modules was the norm. This is evidenced by the fact that, although the curriculum was composed of three subjects per year,[2] the average number of subjects taken per student was lower than 3 in all Spanish high schools (Table 4.2).

Table 4.2. Average number of subjects taken per student in academic year 1877-1878, by university district

University district	Mean	Min	Max
Barcelona	2.4	2.2	2.6
Granada	2.6	2.4	2.7
Madrid	2.3	1.8	2.4
Oviedo	2.5	2.2	2.8
Salamanca	2.6	2.4	2.8
Santiago	2.4	2.2	2.6
Sevilla	2.4	2.1	2.8
Valencia	2.4	2.2	2.7
Valladolid	2.4	2.2	2.7
Zaragoza	2.5	2.3	2.7
Total	2.4	1.8	2.8

Note: Each university district encompassed several provinces which, in turn, may have one or more public high schools. The mean, minimum and maximum refer to all public high schools within the district. Source: *Estadística académica de los estudios de segunda enseñanza*, *Gaceta de Madrid*, August 13th 1880, pp. 462-463.

Taken together, these characteristics point to the existence of a consistent relationship between the age of graduation and the cost of carrying out secondary education studies. Graduating at a young age would signal a rapid journey through the educational system, probably caused by the students' higher abilities or a well-off familiar economic situation, a situation that was usually accompanied by a higher cultural level and thus a positive assessment of education and its benefits. Graduating at an older age, however, would indicate a greater difficulty to access and prosper within the educational system, probably due to lower abilities, worse socioeconomic situations, a lower cultural level or an inaccurate

[2] *Real decreto modificando el plan de estudios de segunda enseñanza de 21 de agosto de 1861*, article 2.

perception about the role of instruction.

Based on this premise, our objective is to use the *Bachillerato* graduation age as a way to empirically verify if there was a relationship between the socioeconomic context of origin of the students and the obstacles they had to face to successfully complete the educational stage.

4.4 Sources and data

As evidenced in the first two chapters of this thesis, one of the main objectives of this dissertation is to contribute to broadening the documentary base on which historical research on Spanish secondary education is undertaken. That is why we consider that also when trying to answer new questions we must resort to new documentary sources that have not been explored so far by the literature.

In this spirit, the analysis of this chapter is based on a source that has been unknown to date or, at least, not used in historical analysis. It is the *Estadística académica de los estudios generales de segunda enseñanza*, (from now on, EAESE) published in the Spanish official gazette (*Gaceta de Madrid*) in 1880. The publication of EAESE constitutes the culmination of the efforts that, starting in 1875, the administration had dedicated to the publication of statistics of the educational system beyond primary education, that is, at the high school and university levels. Unfortunately, after 1880 I have no record of statistical information of this nature being published for subsequent academic years. Probably, those in charge of elaborating and publishing the statistics were not able to find a way to do so in a turbulent political context in which, in addition, the units in charge of treating statistical information did not have the adequate physical and human resources because the administration had more immediate problems to deal with (Pro, 2019). The widespread perception of secondary education as a passing stage whose sole purpose was preparation for university (Viñao Frago, 1996) may have generated less interest in the educational stage, unlike to what happened with primary education, which was the main objective of public policies in the 19th

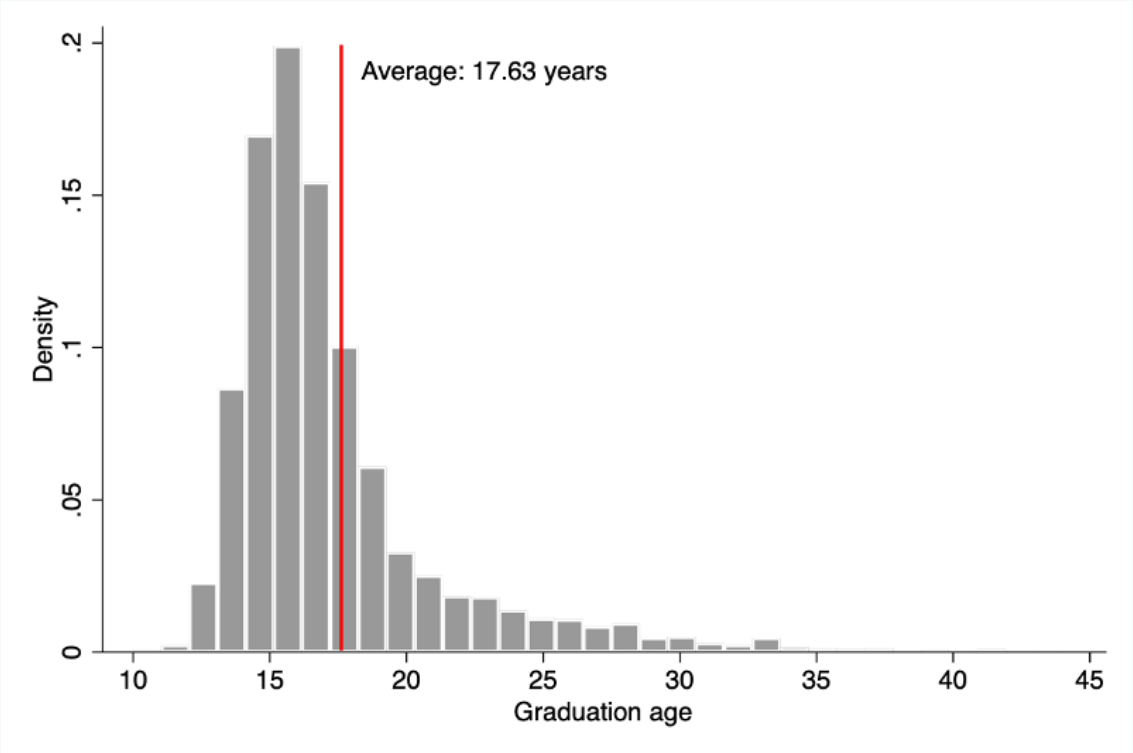
century as it was the first step in the schooling process. The remarkable growth of the secondary school system and the consequent complexity of the data collection and publication process may also have contributed to this development.

EAESE is made up of several parts that cover all aspects of the secondary education educational network in academic year 1877-1878, including details about the financing of each of the high schools that made up the network or a detailed exposition of data related to the performance of students by subjects. In this work I will focus on the last part of the report, which contains the list of students who obtained the *Bachiller* degree during the aforementioned year. This list of graduates was published in several parts in numbers 231 to 254 of the *Gaceta de Madrid*, that is, daily and without interruption between August 18th and September 10th, 1880. The geographical distribution of public high schools shows the persistence of the provincial high school model that, with certain exceptions, characterized the public system well into the 20th century, as it has been shown in Chapter 1 of this thesis. In general, these exceptions corresponded to provinces in which the provincial high school had not been created in the capital in the first place. The reasons were very varied. On some occasions, other cities with greater academic tradition were those that had adequate spaces for the establishment of the *instituto*, such as old universities or *Colegios de Humanidades*, or simply the predisposition of certain organizations to assign spaces devoted to teaching (Viñao Frago, 1982, pp. 421-425). On other occasions, it was the greater economic dynamism of some cities or the lack of interest by local authorities that led to the choice of location of the provincial high school outside the capital. The existence of two high schools in the same province used to respond to the conversion of a local high school into a provincial one (García Martín, 2019).

In total, we find 2,908 students who graduated in the 1877-1878 academic year, distributed among the 61 *institutos* belonging to the 10 university districts that existed at the time. Graduated students are ordered numerically, both at a general level and within each high school, according to the date on which they obtained the title. For each of them the following information is provided: name and surname, age at graduation, municipality or country of origin, municipali-

ties in which each of them took part or all of their secondary education studies, date of completion of the second exam of *Bachillerato* and the date when title was eventually obtained.[3] It is important to note that, in a way, this source also constitutes a unique document for the study of internal migrations in 19th-century Spain, as it contains information not only about the province of birth but also the municipality. Despite its limitations in terms of representativeness, its precocity in this sense is absolute, since not even in the Population Censuses —the reference statistical publication on internal migrations— will information on the province of birth of the migrants be included until 1920 and not even in all censuses after that date (Silvestre, 2001, 2010).

Figure 4.1. Histogram of graduation ages in academic year 1877-1878



Source: see text.

Regarding the background of students, Table 4.3 shows a summary of several pieces of personal information contained in the source. As we can see, there is a strong gender differential in students, as only 2 out of almost 3,000 graduates

[3] The date of completion of the second exam is included for all students, but not the date when the title was obtained, which is only available for some of them. The most likely explanation in these cases is that students had not paid the title fees at the time of submitting the information to the Ministry.

Table 4.3. Summary of main information on students in the EAESE dataset.

By gender	**N**	**%**
Male	2,906	99.93
Female	2	0.07
Total	**2,908**	**100**

By graduation age	**N**	**%**
10-15	843	28.99
16-20	1,636	56.26
21-25	258	8.87
26-30	114	3.92
>30	53	1.82
Unknown	4	0.14
Total	**2,908**	**100**

By origin	**N**	**%**
North	359	12.35
Ebro Valley	304	10.45
Mediterranean	629	21.63
North Castile	399	13.72
South Castile	534	18.36
Andalusia	551	18.95
Canary Islands, Ceuta and Melilla	24	0.83
Abroad	81	2.79
Unknown	27	0.93
Total	**2,908**	**100**

By size of the municipality of origin (1860)	**N**	**%**
0-500	46	1.58
501-5,000	900	30.95
5,001-50,000	1,135	39.03
50,001-100,000	195	6.71
>100,000	632	21.73
Total	**2,908**	**100**

Note: Classification by origin follows the Spanish macro-regions proposed by Rosés and Sánchez-Alonso (2004) and included as a map in Appendix A. Canary Islands, Ceuta and Melilla are not considered in the classification and, thus, are here included separately. Abroad includes those students born in foreign countries or in Spanish territories overseas. **Source:** see text.

were women.[4] With regard to age, we observe how a high percentage of students obtained their Bachelor's degree between the ages of 10 and 20, an age range that

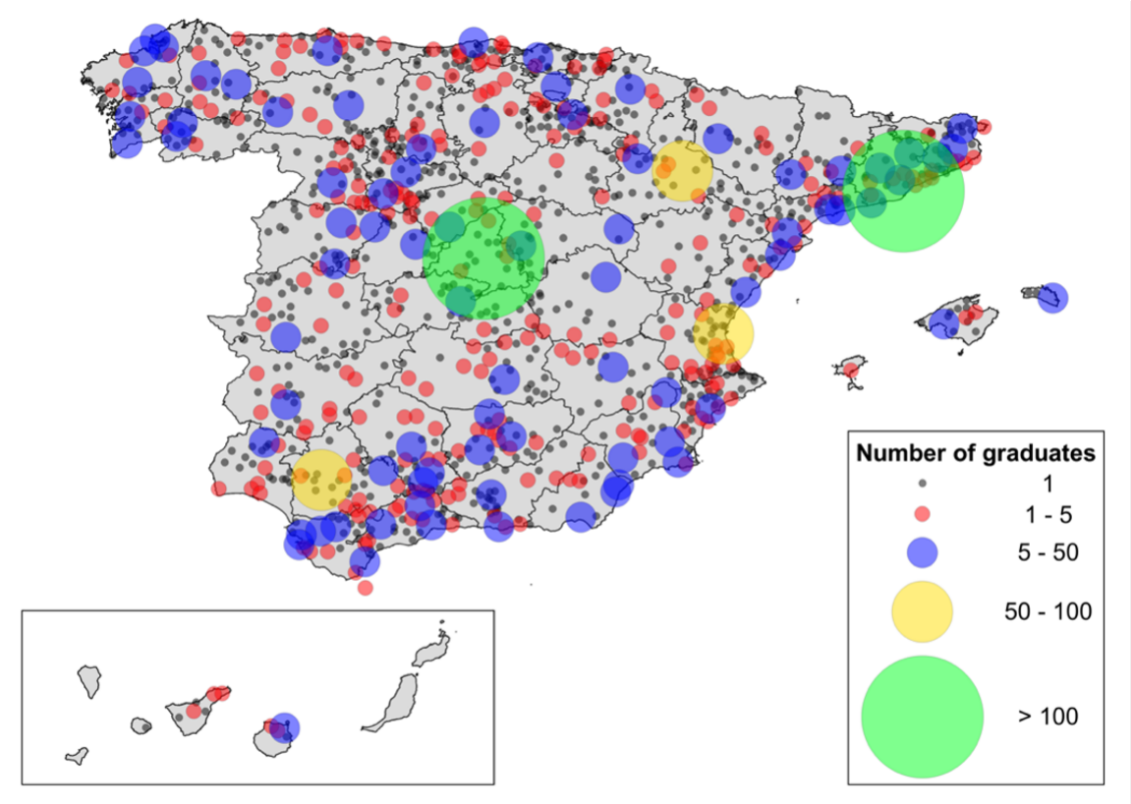
[4] Evidencing this fact allows us to refute the statement that women did not apply for high school degrees in Spain until the 1890s (Boyd, 1997, p. 14). Also importantly, this gender differential should be looked at taking into account that women were not admitted in secondary education until 1870 and that only 21 women enrolled in high schools between 1870 and 1875, as estimated by Flecha García (1998, pp. 165-166).

would fall within the normal range when it comes to progressing in the educational system.

Figure 4.1 shows the histogram of Bachiller graduation ages for the universe of students graduating from Bachillerato in the 1877-1878 academic year, evidencing a fairly-skewed distribution around a mode of 16 and a mean of 17.63 years old. The great variability existing within the age group between 10 and 20 years is very high, which would confirm the inability of the educational system to establish a system of schoo levels with an age correspondence. As noted above, the family context and their ability to provide their offspring with an early access to primary education may be behind the differences between those who graduated before and after reaching 15 years old. In addition, around 15% of the graduates graduated when they were 21 years of age or older, which reflects the heterogeneous mix of life trajectories that we can find among the individuals in the sample, in this case surely related to episodes of abandonment and return to school, combining studies with work, etc.

Regarding the size of the municipalities of origin, we can see how a large majority of students came from municipalities with more than 5,000 inhabitants, with around 20% of graduates coming from large cities with more than 100,000 inhabitants. Beyond those who came from large cities, for which access to the educational system was much easier, most of the students come from medium-sized municipalities, between 5,000 and 50,000 inhabitants, although a non-negligible proportion came from smaller municipalities up to 5,000 inhabitants. The presence of this group of students allows us to obtain the variability in terms of the size of the municipalities of origin that will serve as a starting point for the empirical analysis that we propose in this chapter. Taking advantage of the relatively large number of students from small or medium-small municipalities —and who, therefore, according to our argument, would be the most likely to be *away-from-knowledge*—, we will test whether municipality size has any effect on the life trajectory of students who were born and raised in it when progressing through the educational system.

Figure 4.2. Map of municipalities of origin and number of graduates coming from each municipality.



Source: see text.

From a spatial point of view, Figure 4.2 shows the municipalities of origin of graduates in EAESE and the number of graduates who were born in the same municipality in case there was more than one. The only two cities from which more than 100 graduates come from are Madrid and Barcelona. In a second level there are three cities with between 50 and 100 students of origin: Sevilla, Valencia and Zaragoza. A large percentage of graduates come from the Mediterranean region, with significant concentrations in the Catalan provinces, Valencia and Alicante. Andalusia also concentrates a large percentage of graduates, especially in the territories of Málaga and along the Baetic Depression, in the provinces of Jaén, Córdoba, Sevilla and Cádiz. South Castile also adds a large number of graduates, which is largely explained by the inclusion of the city of Madrid in the region. North Castile region also concentrates a significant number of graduates, who are mainly concentrated in the central area of the region, especially in Valladolid and Salamanca. In the North region there is a mostly uniform concentration in

space, as it also happens in the Ebro Valley region, where most graduates come from Zaragoza.

4.4.1 Limitations of the source

The main limitation of the source is given by the very nature of the publication: only students who obtained the title are included in the list. Therefore, there is a selection bias in the sample towards students who managed to successfully complete the educational stage. However, it is important to bear in mind that, according to Viñao Frago (1996, p. 141), 19th-century secondary education was a "barely selective" educational stage, with a low rate of failures, grade retention or dropouts and a high proportion of excellent grades.[5] In some cases, the selection of students took place prior to access through a social mechanism usually associated with the economic position of the family, from which derived not only their ability to defray academic expenses but also its function as a sign of distinction. This distinction used to be influenced if the parental profession had a certain social relevance, as evidenced by some qualitative analyses of the social extraction of high school students (Sánchez Pascua, 1985; Domínguez Rodríguez, 1991).

However, while it is true that the family social position and the parental profession were usually associated to access to secondary education, they were not the only ones. Studies focused in other provinces show a much less elitist image of access to secondary education in the 19th century. In the case of the province of Castelló, the distance from the students' home to the educational center or even their own intellectual abilities have been pointed out as explanatory factors of increasing access to secondary education "of those who belong to the most economically and culturally disadvantaged professional groups" (Altava Rubio, 1993, p. 221).

In any case, this characteristic imposes a first warning about the usefulness

[5] In fact, in academic year 1877-1878 the national average rate of failure was 13.37%, ranging from the 9.51% in the Barcelona university district to the 19.52% in the Madrid university district (*Estadística académica de los estudios de segunda enseñanza*, *Gaceta de Madrid*, August 13th 1880, pp. 462-463).

of the source, since it is not representative of many relatively common socio-educational situations at the time. This would be the case, for instance, of students who undertook their studies and failed for purely academic reasons, those whose family circumstances forced them to abandon their studies or those who, having passed the subjects of the study plan, did not pay the fees in order to get their title, since they did not need it for their jobs or to access university, all of which were relatively common situations in the daily context of a provincial high school in the 19th century (**?**). There were also cases in which the relationship of the students with the high school was purely tangential, as is the case of those students who prepared the contents of the subjects through private tutors and only resorted to the school to make the final exam and get the title.

Another consequence of the aggregate nature of the source is that doubts may arise regarding the reliability of the data contained in it. It is known that during large-scale data collection processes, the data could suffer alterations due to numerous causes, intentional or not, as occurred in the case of population censuses (Gozálvez Pérez and Martín-Serrano Rodríguez, 2016) or in the school statistics themselves (Guereña and Viñao Frago, 1996, p. 235). In order to alleviate these suspicions, I have contrasted some of the statistics with those obtained in high schools' own archives in previous studies. Thus, for the *instituto* of Salamanca, EAESE collects 546 students enrolled in the 1877-1878 academic year: 205 of them in official education, 317 in private education and 24 in domestic education. According to Hernández Díaz (1986, p. 257), using the records from the high school's own archives, in that academic year there were a total of 550 students: 209 as official, 317 as private and 24 as domestic. Thus, the discrepancy is minimal and in the breakdown by types of education the figures are practically the same. Along the same lines, Benso Calvo (1994, p. 331) provides the number of students enrolled in general studies and in applied studies at the Orense *instituto*. According to the high school's records, in academic year 1877-1878 there were 377 students enrolled in general studies and 11 in applied studies, exactly the same as those listed in EAESE.

4.5 Empirical exercise

In section 3, historical evidence has been provided to prove the usefulness of Bachillerato graduation age as a proxy of the obstacles the students had to undertake to acquire education. In this section I aim to empirically assess whether there was an asymmetry in the costs faced by students depending on the size of their municipalities of origin. In order to do so, the following econometric specification is proposed:

$$age_i = \beta_0 + \beta_1 size1860_i + \beta_2 size1860_i^2 + \gamma X_i + \delta Z_i + \epsilon_i \tag{4.1}$$

where the dependent variable age_i is the Bachiller graduation age of student i. $size1860_i$ is the population size (in number of inhabitants) of the municipality of origin of student i in year 1860, according to the 1860 Population Census. I assume that population size in the 1860 Census is equal to the size of the municipality of origin when the individual was born[6] and that size, in turn, is a good proxy variable of the level of cultural activity of the municipality, considering the reasons explained in Section 2. X_i is a set of variables related to the educational circumstances of the student that may have affected graduation age, including the distance (in kilometers) from the municipality of origin to the high school of graduation, a dummy variable reflecting whether the student changed province in order to graduate, as well as the number of intermediate schools the student went through during his secondary studies. Z_i is a set of university district and provincial fixed effects, and ϵ_i is the error term.

The results of estimating Model 4.1 by OLS are presented in Table 4.4. Specifications (1) and (2) correspond to the baseline model, without and with fixed effects. Specifications (3) and (4) add distance as a control, and (5) and (6) include the whole set of controls. As expected, the coefficients of the linear term

[6] As showed in Section 4.1, data refers to academic year 1877-1878 and the average graduation age for the whole sample is 17.63 years. Thus, year 1860 would be the year of birth for the average individual in the sample.

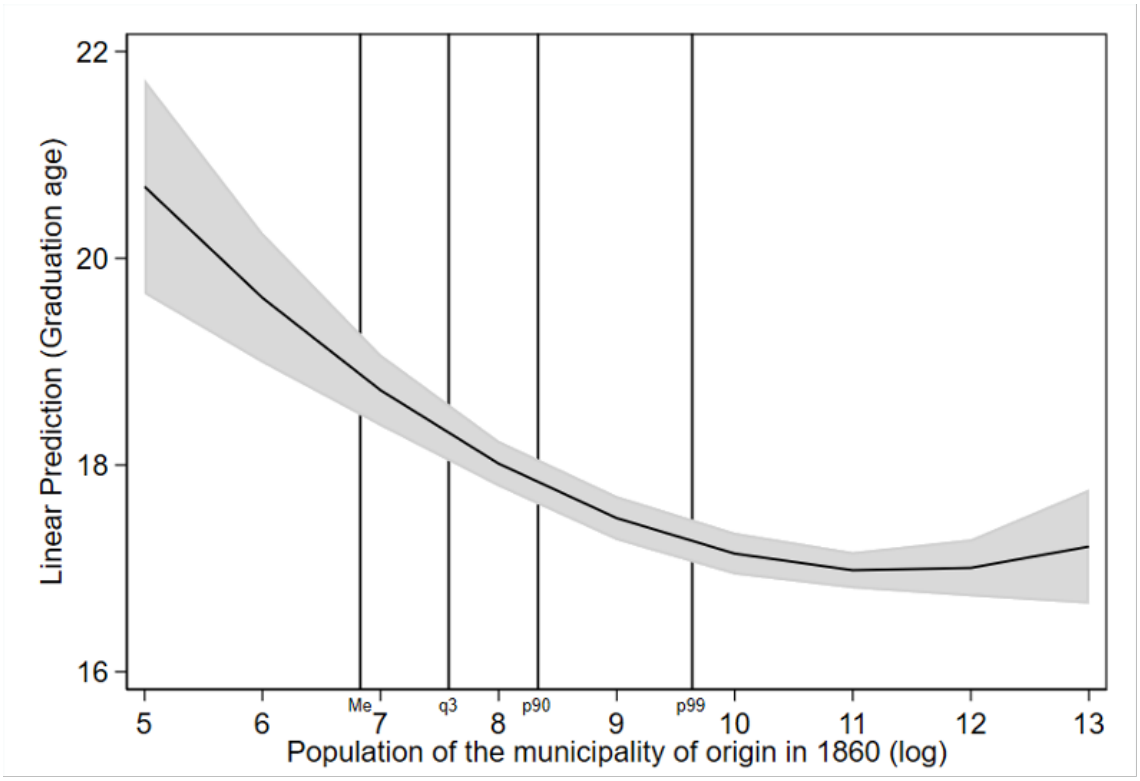
Table 4.4. Baseline model OLS estimation.

Dependent variable: Bachillerato graduation age						
	(1)	(2)	(3)	(4)	(5)	(6)
$size1860_i$	-1.061**	-1.886***	-1.115***	-1.918***	-1.093**	-2.088***
	(0.419)	(0.514)	(0.421)	(0.515)	(0.425)	(0.514)
$size1860_i^2$	0.035*	0.079***	0.038*	0.081***	0.038*	0.091***
	(0.021)	(0.027)	(0.021)	(0.027)	(0.021)	(0.027)
$distance_i$			0.002***	0.002***	0.001	0.001
			(0.001)	(0.001)	(0.001)	(0.001)
$provmob_i$					0.226	0.226
					(0.236)	(0.242)
Number of intermediate schools (baseline category: $intermediate_i = 0$)						
$intermediate_i = 1$					0.564***	0.622***
					(0.184)	(0.189)
$intermediate_i = 2$					0.650	0.703*
					(0.401)	(0.382)
$intermediate_i = 3$					2.693*	2.774*
					(1.475)	(1.471)
$intermediate_i = 4$					2.092	1.123
					(2.242)	(2.731)
Intercept	24.394***	26.578***	24.384***	26.501***	24.040***	26.794***
	(2.050)	(2.617)	(2.049)	(2.645)	(2.063)	(2.655)
Province FE	N	Y	N	Y	N	Y
University district FE	N	Y	N	Y	N	Y
Observations	2686	2686	2670	2670	2670	2670
R^2	0.034	0.088	0.040	0.092	0.048	0.101
F-test	38.42	5.45	29.4	5.47	12.93	5.46
$Prob>F$	0.000	0.000	0.000	0.000	0.000	0.000

Standard errors (in parentheses) are robust and clustered at the municipality level.
Levels of significance: $*p < 0.10, **p < 0.05, ***p < 0.01$.

of size of the municipality in 1860 are negative and highly significant in all specifications. In particular, results show that a 1% increase in the size of the population in 1860 would entail, keeping all other factors constant, a decrease in the *Bachillerato* graduation age of around 0.02 points. In addition, the coefficients of the quadratic term are positive and significant, especially in the specifications in which fixed effects are included. Both characteristics reveal that the relationship between age and size of the municipality of origin has a convex shape. This can be seen in Figure 4.3 the linear prediction of the 1860 municipal population on age decreases sharply with population in the case of smaller municipalities, but the relationship stabilizes noticeably in the case of those coming from larger municipalities. Therefore, students from smaller municipalities graduated on average at a considerably higher age, but such costs disappear for students from larger

Figure 4.3. Linear prediction of graduation age on the size of the municipality of origin in 1860.



: Spikes show the median, third quartile, percentiles 90 and 99 of Spanish municipalities population in the 1860 Population Census.

municipalities, for which the costs remain roughly constant.

The behavior of the rest of variables is also worth analyzing. The effect of distance on the age of graduation is positive and significant when distance is the only control variable (specifications (3) and (4)), but this significance disappears when I add the rest of control variables (specifications (5) and (6)). The effect of provincial mobility has a positive sign as expected due to the increased difficulties in migrating, although it is not statistically significant. Regarding the number of intermediate schools in which the student has taken secondary studies, the effect of having been through several schools is also positive and significant. The effect increases with the number of schools, although the standard errors for the estimates are increasingly larger and, thus, their statistical significance decreases, probably due to the small number of observations who have been through more than two intermediate schools. In any case, the results of the baseline model estimated by OLS are consistent with our predictions, both in terms of the robustness

of the effect of size in the age of graduation and in the signs of the effects.

However, the estimation of the model by OLS has a significant drawback. It should be remembered that, I have shown in previous sections, I assume graduation age to be a reflection of the costs that students had to face in order to be able to study and successfully complete their studies. Therefore, different Bachillerato graduation ages signal different socioeconomic profiles, and thus it is necessary to carry out a differentiated analysis of the effects along the distribution of graduation ages. In particular, my interest lies in knowing if the size of the population of origin at birth had a differential effect on the costs borne by students graduating at different ages.

In order to carry out such an analysis, I use quantile regression to re-estimate model 4.1. Quantile regression allows to obtain estimates for the different conditional quantile functions, thus capturing the differential effects along the distribution of the dependent variable (Koenker and Bassett, 1978; Koenker, 2005), as opposed to least squares estimation, which provides single estimates for the conditional mean of the dependent variable. Such an approach is useful, for instance, when we are interested in knowing the effects at the tails of the distribution, when the dependent variable does not follow a Normal distribution and, therefore, the mean does not coincide with the median, or when we suspect that the error structure of the model is somehow heterogeneous, and thus OLS estimates are not informative. Quantile functions in a regression model can be expressed as:

$$\widehat{Q_y}(\tau|x) = \beta_0 + \beta_1 x_t + F_u^{-1}(\tau) \tag{4.2}$$

for any given percentile τ.

Table 4.5 shows the results of re-estimating Model 4.1 using quantile regression for percentiles 10, 25, 50, 75 and 90. Following Parente and Santos Silva (2016), I use cluster-robust standard errors in case there exists intra-cluster correlation. The results of OLS estimation are also included in the table for comparison purposes. As expected, quantile regression results suggest that the size of the ef-

Table 4.5. Quantile regression results.

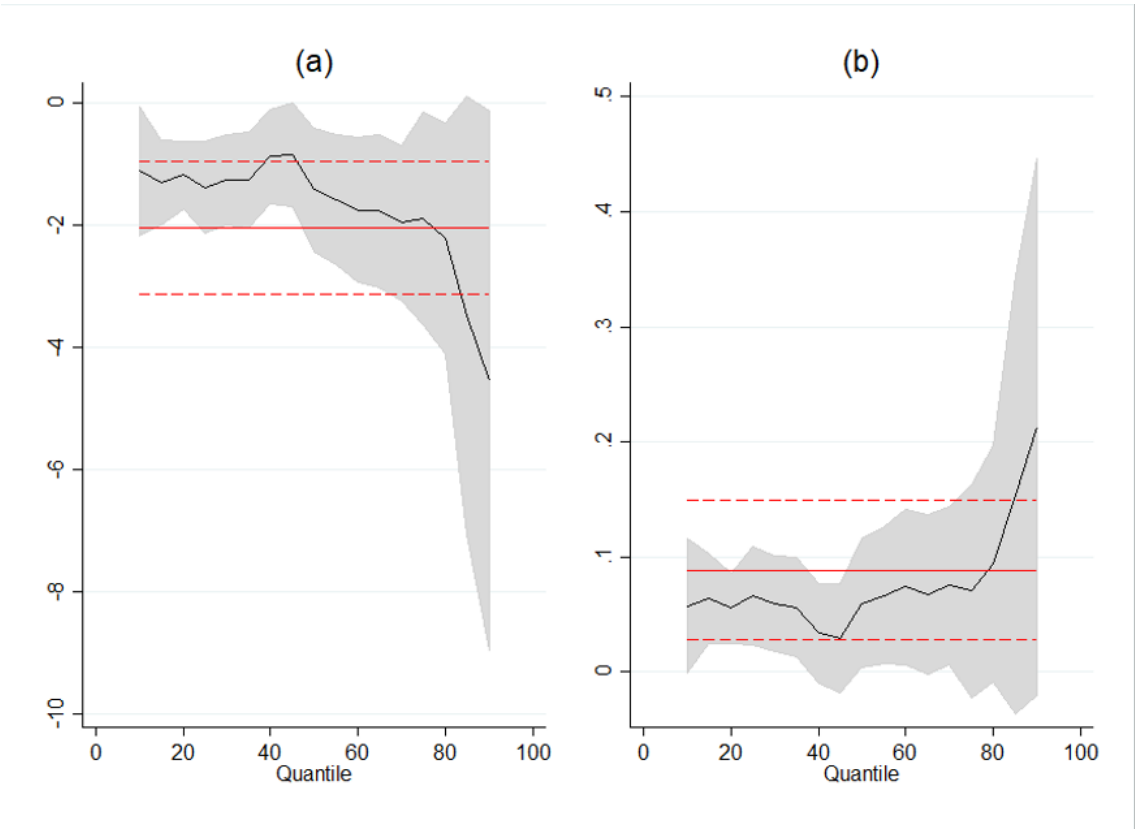
Dependent variable: Bachillerato graduation age					
	Quantile regression				
	$\tau = 0.1$	$\tau = 0.25$	$\tau = 0.5$	$\tau = 0.75$	$\tau = 0.9$
$size1860_i$	-0.967*	-1.354***	-1.457***	-2.259**	-4.773**
	(0.495)	(0.328)	(0.475)	(0.910)	(2.034)
$size1860_i^2$	0.044	0.061***	0.062**	0.098**	0.229**
	(0.027)	(0.017)	(0.025)	(0.047)	(0.105)
$distance_i$	-0.000	-0.000	-0.001	0.001	0.004
	(0.001)	(0.000)	(0.001)	(0.002)	(0.008)
$provmob_i$	-0.412**	-0.150	-0.098	0.439	1.677
	(0.181)	(0.153)	(0.159)	(0.441)	(1.043)
Number of intermediate schools (baseline category: intermediatei = 0)					
$intermediate_i = 1$	0.454***	0.194*	0.248**	0.858***	1.056
	(0.162)	(0.106)	(0.124)	(0.316)	(0.987)
$intermediate_i = 2$	0.171	0.319	0.621*	0.812	-0.258
	(0.234)	(0.383)	(0.358)	(0.609)	(2.361)
$intermediate_i = 3$	0.154	1.022	1.621**	3.334***	10.276***
	(1.023)	(1.981)	(0.700)	(0.846)	(2.294)
$intermediate_i = 4$	2.089***	0.720	6.077***	2.670**	-0.468
	(0.590)	(0.628)	(1.025)	(1.234)	(1.801)
Intercept	18.607***	22.777***	24.445***	26.391***	40.665***
	(2.481)	(1.558)	(2.393)	(4.704)	(9.284)
Province FE	Y	Y	Y	Y	Y
University district FE	Y	Y	Y	Y	Y
Observations	2670	2670	2670	2670	2670
R^2	0.037	0.049	0.075	0.090	0.075
Adjusted R^2	-	-	-	-	-
Pseudo-R^2	0.046	0.038	0.060	0.079	0.140
Parente-Santos Silva test	1.994	2.223	0.628	1.364	-0.510
Parente-Santos Silva p-value	0.046	0.026	0.530	0.172	0.610

Standard errors (in parentheses) are robust and clustered at the municipality level.
Levels of significance: $*p < 0.10, **p < 0.05, ***p < 0.01$.

fect of population in the municipality of origin in 1860 is different along the conditional distribution of graduation age. Specifically, I observe that the size of the effect grows bigger as the percentiles increase, with the increase rate being particularly relevant beyond percentile 50, as shown in Figure 4.4. This implies that the size of the municipality of origin had an increasing influence on students who graduated at an older age, that is, those who faced higher obstacles to achieve the *Bachiller* title. In other words, the harder it was for a student to study, the greater was the penalty for being born in a given context.

Also, the increasing size of the quadratic term along the percentiles confirms the non-linear relationship among the variables by showing that only from the

Figure 4.4. Quantile effects of population in the municipality of origin (1860) covariates: (a) linear, (b) quadratic term.



Note: Black lines are the point estimates of the quantile regressions, while grey areas correspond to the 95% confidence intervals of the quantile regressions. Red continuous lines are the OLS point estimates, while red dotted lines are the 95% confidence intervals of the OLS estimates.

25th percentile the second derivative is significantly positive and, therefore, the relationship shows a convex relationship especially in the highest quantiles of the distribution. As in the model estimated with OLS, neither the effect of distance nor provincial mobility are statistically significant. However, it is worth mentioning that both effects monotonically increase in size along the percentile distribution, evidencing a certain differential behavior of both factors for the different profiles of students, although their effect is not statistically different from zero. The number of intermediate schools is not statistically significant in all cases, but an increase in the size of the effect throughout the percentile distribution is in general also observed.

4.6 Conclusions

In this chapter, I have tried to show that the place of origin was a source of inequality of opportunities of access through secondary education in 19th-century Spain. In order to do so, I have provided historical evidence to argue that *Bachillerato* graduation age is an effective method to measure the difficulties in access to education. Then, I have exploited a primary source that had never been used before by the literature and that contains personal information on all Spanish *Bachillerato* graduates in academic year 1877-1878.

The combination of both procedures has yielded several results. First, the difficulties to access education as measured by graduation age are negatively correlated with the size of the municipality of origin, meaning that the geographical context of origin deeply affected the ability of students to undertake secondary education. Specifically, graduation age decreases as the number of inhabitants of the municipality of origin increases in the case of smaller municipalities, but this relationship stabilizes in larger municipalities. In other words, only students coming from smaller municipalities faced higher obstacles than average to access secondary education. Second, the effect of the size of the municipality of origin in graduation age is not constant along the distribution of graduation age. In particular, quantile regression analysis shows how the negative effect is increasingly larger for higher percentiles of graduation age, showing that the municipality of origin determined to a greater extent a cost for those students who graduated older and, therefore, faced higher obstacles to study.

The combination of both results has allowed us to confirm the existence of away-from-knowledge (AFK) areas in 19th-century Spain, at least in terms of access to secondary education. The verification of the existence of places that imposed larger obstacles than the average when their natives wanted to access secondary education due to the location of public high schools is undoubtedly a factor that may help to explain the low enrollment rates in secondary education that were recorded in Spain throughout the second half of the 19th century. Beyond the traditional explanation of low levels of literacy as the cause of low

enrollments in secondary education, this chapter shows that the phenomenon of access to secondary education might have been much more complex than previously thought. In this specific scenario, geographical factors may have caused a situation of inequality of opportunities in access to secondary education and this constitutes, in short, a mechanism through which one of the main hypotheses considered throughout this thesis could have operated: that the small number of public high schools that the country had during the second half of the 19th century represented a significant brake on the popularization of the educational stage and, therefore, on its growth in terms of students and gross enrollment.

However, the sluggishness in the growth of the public network not only had an effect on students and their chances of accessing secondary education, but also led to a change in the behavior of private agents who wanted to open secondary schools. As we saw in Chapter 2, from the 1880s decade the number of private schools grew intensely at the same time as there was a significant transfer of students from public to private schools. In the next chapter we will study the pattern of expansion of the private school throughout the Spanish geography given the state's inability to expand the public network of high schools.

Chapter 5

The extension of secondary education in Spain, 1857-1901[1]

5.1 Introduction

As emphasized in the Introduction, the two main phenomena that characterize secondary education in Spain during the second half of the 19th century are the stagnation in the number of students and the rate of enrollment, and the practically null creation of new public high schools. In addition, this process was matched by an explosion in the number of private schools and a transfer of students from the former to the latter. If in the previous chapter we proposed a mechanism through which the meager size of the public network could have been an obstacle for the enrollment of new students, in this chapter we are going to deal with the strategic behavior of private agents when it came to creating new private centers in municipalities other than the provincial capitals, where public high schools were located.

Given the flexibility of the requirements to open new private schools that were imposed from 1880 (Díaz de la Guardia Bueno, 1988) (see Chapter 2), it seems rea-

[1] A version of this chapter has been published as the following journal article: Insa-Sánchez, P. and Díez-Minguela, A (2022) "The extension of secondary education in Spain, 1857-1901", *Cliometrica*, forthcoming.

sonable to assume that private schools followed a strategic behavior that led them to establish themselves in those places where they anticipated that they could develop their activity with greater guarantees of success. If this had been the case, we argue that the study of the factors that determined the establishment of private schools in Spanish municipalities is a good way of measuring whether there was a potential demand for secondary studies during the period we are studying. However, we know little about the extent of private secondary schools in Spain during the second half of the 19th century. We only have extensive studies that have been able to inventory the census of private schools for the whole of Spain in a few specific years (Viñao Frago, 1982; Díaz de la Guardia Bueno, 1988) or more detailed analyses of the behavior of the religious orders. religious that promoted the creation of private centers in specific regions, as is the case of Guipúzcoa (Ostolaza Esnal, 2000; Fullana and Ostolaza, 2007). Therefore, we believe it is necessary to adopt a national approach that allow us to know what the dynamics were at the aggregate level in order to be able to draw conclusions about the development of the school network as a whole.

In this chapter, we try to fill this gap by documenting the origins and early years of private secondary education in Spain. We examine empirically the spatial distribution of private schools by assessing the impact of different socioeconomic variables on the decision of opening a private school. For this, a new dataset with information at the municipal level is presented. Our results show that the creation of new private schools was not a random process. In line with the high school movement (Goldin and Katz, 2008), demand was largely responsible for it, but the Spanish case offers further insight, especially regarding the interplay between local forces and private agents. Although it is difficult to quantify, it has been estimated that at the turn of the twentieth century around a quarter of the elementary schools and nearly 80% of secondary schools were somehow related to the Church (García Regidor, 1985; Castells, 1973; López-Sidro López, 2003). Relevantly, the mounting presence of Catholic schools reignited the religious question which in turn led to a conflictive secularisation that marked the early 20th century (de la Cueva and Montero, 2007).

To do so, this chapter is structured as follows. Section 5.2 portrays the historical context. Section 5.3 describes the data sources used and Section 5.4 discusses the empirical methodology used. Results are presented in Section 5.5 while a final discussion is offered in Section 5.6.

5.2 Historical background

As mentioned extensively in previous chapters, in 1845 a new education plan the *Plan Pidal*, was enacted. Since elementary schooling was under the auspices of local authorities, this reform aimed at secondary and higher education, thereby introducing a curriculum and State schools for each level. Secondary education was structured in elementary (5 yrs.) and extended (Arts; Sciences). Likewise, a public examination system was put into place to access teaching (see Chapter 3 and Benso (2002)). With respect to higher education, only State universities and advanced schools were allowed thereby limiting private initiatives to secondary studies and elementary instruction.

Besides, each of the 49 newly created provinces would have an Instituto (article 57), an aspect that, as we have defended in the previous chapters, will have a capital relevance in the modest performance of the secondary education system in terms of students and enrollment. In any event, the truth is that the *Plan Pidal* paved the way to State-regulated education, which ignited a sense of uneasiness within conservative sectors (Ruiz Rodrigo and Palacio Lis, 1983). It is worth remembering that the Church, through religious institutes or dioceses, run a large part of the existing centres, from elementary schools to universities. The *Plan Pidal* not only pushed private (mostly religious) initiatives out of higher education, but it also reduced the freedom to open new schools by imposing strict requirements on new initiatives.

Besides, religious institutes had just been suppressed and their property disentailed whereas certain privileges (tithe...) had been abolished.[2] The mount-

[2] Royal Decree, Feb. 19, 1836; Royal Decree, Mar. 7, 1836; Law, Jul. 29, 1837. Likewise, the Society of Jesus (or Jesuits), a religious institute in charge of a good number of colleges in the

ing conflict between Church and State was somehow appeased with the signing of a Concordat with the Holy See in 1851. In this accord, however, the Church regained lost ground. Catholicism was ratified as State religion (article 1) and, more importantly, all teachings had to be in accordance with the dictates of the catholic doctrine. The ecclesiastical hierarchy was empowered to supervise *in situ* whether this was observed (article 2).

Within this context, the Public Instruction Law (or *Ley Moyano*) was enacted in 1857. The *Ley Moyano* basically put together most of the reforms that had been passed before that date in order to articulate an education system as such. Although several reforms were introduced during the *Sexenio Democrático* (1868-1874), the restoration of the Bourbon monarchy in 1874 marked the late 19th century. Catholicism was reaffirmed as State-religion in the Constitution of 1876 which also guaranteed that "*everyone is free to choose their profession and learn it as they see fit. All Spanish nationals may establish and support educational centres in accordance with the laws*" (article 12). In 1880, an educational reform (or Lasala Plan) eliminated the minimum entry age and instituted a new curriculum (5 yrs.) (Díaz de la Guardia Bueno, 1988).[3] Secondary studies thus became shorter and hence cheaper, whereas private education enjoyed further benefits.

For instance, teachers from private centres began to form part of examination boards. Similarly, and although repealed a year later, a royal decree, enacted in 1885, permitted, under some conditions, the assimilation of private centres as officials or *Institutos*. In 1887, the Associations Act (*Ley de Asociaciones*) guaranteed the "freedom of association" thereby establishing a legal framework for political parties, trade unions, learned societies or religious associations, among others, which explicitly supported the freedom of entities such as religious congregations to pursue educational activities without restrictions. Thus, and considering the limited financial capacity of the State, the supply of secondary education largely

18th century, had been expelled in 1767, reinstated in 1815 and expelled again in 1835. The Jesuits were once again expelled by decree in 1868. The Piarists (known as *escolapios*), who also dedicated to education as the Jesuits, were exempted.

[3] The State incorporated secondary ofcial education (or *Institutos*) into its budgetary plans in 1887. However, there seems to be little, if any, change in expenditure between 1887 and 1901 (Díaz de la Guardia Bueno, 1988).

depended upon private initiatives within which Catholic or Church related ones rapidly emerged. As Fullana and Ostolaza (2007) point out, the proliferation of Catholic schools is closely linked to the interplay between local forces and the Church (dioceses, religious institutes).

As we showed in Chapter 2, by the end of the 19th century the composition of secondary education had rapidly changed as compared to the situation in 1860 (Figure 5.1), while a good number of religious institutes devoted to education had settled in the country.[4]

Table 5.1. Spain at a glance, 1857–1901.

	1857	**1901**
Secondary education (general studies)		
Students	16.383	33.196
Institutos	55	59
Private centres	55	608
Society and territory		
Population	15.460.625	18.616.630
Literacy rate (%)	26	43
Municipalities (total)	9.358	9.267
Municipalities (>5,000)	555	674
Employment (%)		
Agriculture	64	61
Industry (inc. construction)	16	17
Services	20	22
Railway length (in km.)		
Broad-gauge	586	10.820
Narrow-gauge	87	2.306

Sources: Secondary education (*Anuario estadístico de España*, 1858; *Anuario histórico-estadísticoadministrativo de instrucción pública*, 1873–1874; Núñez (2005, Table 3.5); *Anuario estadístico de instrucción pública*, 1899–1900); Society and territory (censuses of 1860–1900; Núñez (1992)); Employment (Prados de la Escosura, 2017); Railway length (Esteban Oliver, 2020).

Table 5.1 shows some descriptive statistics. Bearing in mind that population aged 10-16 years old ranged from around 2 to 3.5 million during the period, the crude enrolment rates were low.[5] Still, it is worth stressing that the *Bachiller de*

[4] For example, de la Salle Brothers (1878), Marists (1888), Marianists (1893) and Salesians (1893) (López-Sidro López, 2003, Appendix I). In fact, using the information published in the *Anuario estadístico de instrucción pública (curso académico 1899–1900)* we find that nearly 70% of the 608 private schools had a religious name. For an overview of the resurgence of religious institutes in 19th-century Spain, see Cárcel Ortí (1980).

[5] In Spain, schooling was compulsory until 9 yrs. (1857–1912); 12 yrs. (1912–1964); 14 yrs. (1964–

Artes degree was a prerequisite to pursue advanced studies and, in some cases, to access the civil service (Díaz de la Guardia Bueno, 1988). In particular, the number of students doubled from 1857 to 1901 and its composition sharply changed (see Figure 5.1). While two thirds of students attended Institutos in 1857, this pattern had been reversed at the turn of the 20th century. In fact, the total number of official students was somewhat similar.[6] Relatedly, and although the economy as a whole did not experience a deep structural transformation, further change occurred especially regarding communications and transport which stimulated the process of national market integration (Rosés et al., 2010). For example, the broad-gauge railway network was nearly completed in 1901. Also, it has been argued that the Disaster of 1898, or the loss of the last colonies (Cuba, Puerto Rico, Philippines) was a turning point in the history of Spain (Betrán and Pons, 2020).

5.3 Sources and data

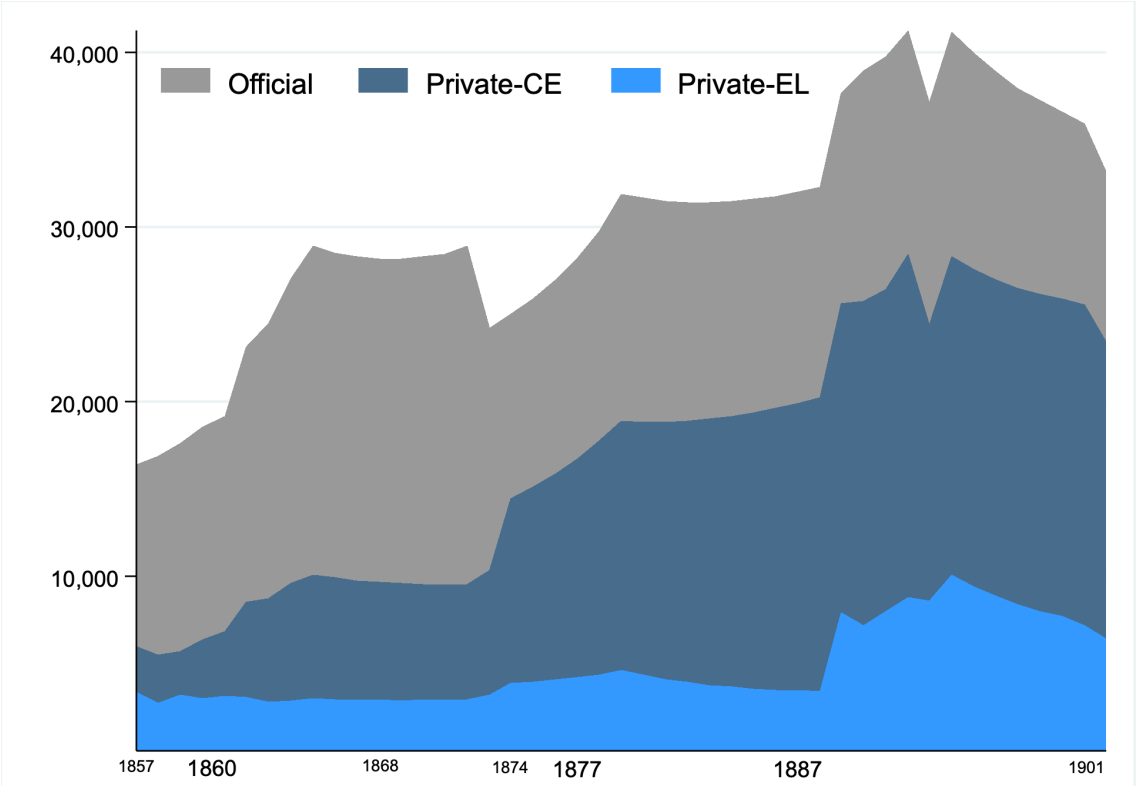
To study the extension of secondary education from 1857 to 1901, we built a dataset with information on public and private secondary schools. Using census years as reference (1860, 1877, 1887, 1900), we first digitised school-level information drawing from a wide array of sources. Regarding public high schools, historical information is widely accessible in *Anuarios Estadísticos* (or Statistical yearbooks) and the *Escalafón general de catedráticos de instituto de segunda enseñanza* published in 1861, 1876 and 1885.[7] Besides, we used the 1889 and 1900 install-

1990) and 16 yrs. (1990-). When compared to other countries, see Figure 1.1, it can be seen that enrolment in secondary education was for most part of the twentieth century relatively low.

[6] The number of students enrolled in higher education was approximately half of those enrolled in secondary. Regarding applied studies, several eforts were made to establish arts and crafts schools (*Escuelas de Artes y Oficios*), particularly in the 1890s. Consequently, the number of students grew rapidly, reaching a total of 17.375 by 1900 (Lozano López de Medrano, 2014, p. 167). Similarly, and according to the *Anuarios Estadísticos*, the number of students in seminaries remained relatively unchanged, ranging from 8,000 to 11,000.

[7] The earliest Statistical yearbook was published in 1858 by the recently created *Comisión de Estadística general del Reino* that preceded the *Instituto Geográfco y Estadístico* and the *Instituto Nacional de Estadística (INE)*. The *Escalafón*, however, listed all active secondary education *catedráticos* according to their seniority and merit (see Chapter 3).

Figure 5.1. Composition of secondary education (general studies) by type, Spain 1857–1901.



Note: Official refers to students enrolled in *Institutos*, whereas Private-CE and Private-EL stands for students enrolled in private schools and those opting for private tuition (tutors and small academies), respectively. **Source:** Núñez (2005, Table 3.5).

ments of *Anuario estadístico de instrucción pública* for 1887 and 1900. In short, there were 55 public high schools in 54 municipalities in 1857, as two of them were located in the capital-city of Madrid. Out of the 49 provinces all had at least an *Instituto*, often located in the provincial capital except for Cádiz, Canarias, Coruña and Guipúzcoa. In these cases, the *Instituto* was in Jerez de la Frontera, San Cristóbal de la Laguna, Santiago de Compostela and Vergara, respectively. Also, there were public high schools in Baeza (Jaén), Cabra (Córdoba), Figueras (Girona), Osuna (Sevilla) and Tudela (Pamplona). By 1901, all provincial capitals had an *Instituto* and some municipalities witnessed the opening of a new public school, amounting to a total of 59 public high schools.

With respect to privately funded and managed schools, the recollection of information was far more complex. Although the 1858 Statistical Yearbook specifies 55 schools, it does not provide further details, such as name or location. In order

to obtain this information, we use the *Anuario histórico-estadístico-administrativo de instrucción pública*, published in 1873-1874. This is one of the few quantitative sources on secondary education for the 19th century (Pan-Montojo, 1993) and, as far as we are aware, the earliest one with comprehensive information on the officially recognised (*incorporados*) private schools. In particular, it offers the name of the school; municipality where located; the public high school to which it was adscribed; the number of students and the date of foundation. Since the year of foundation is known, we use this information to fill in the gaps from previous sources. That said, it is likely that the number of schools could have been underestimated since some, mainly small family-owned academies, could have decided not to incorporate and hence students would be under the heading of *enseñanza libre*.

Then, we also collect information for 1874, 1887 and 1900. As previously said, the *Anuario histórico-estadístico-administrativo de instrucción pública* offers a detailed list of all private schools in 1873-74. For 1887 and 1900, we have digitised the *Anuario estadístico de instrucción pública*, published yearly between 1889 and 1910.[8] This official publication includes detailed information on the name of each school; municipality where located, *Instituto* where incorporated and, in most cases, the number of students. For those in Madrid and Barcelona, the postal address is also given. Similarly, though only in some cases, it is mentioned whether a centre is run by a religious institute (Piarists, Jesuits...). Yet, this is not consistently reported and hence does not allow us to delve further into the matter.

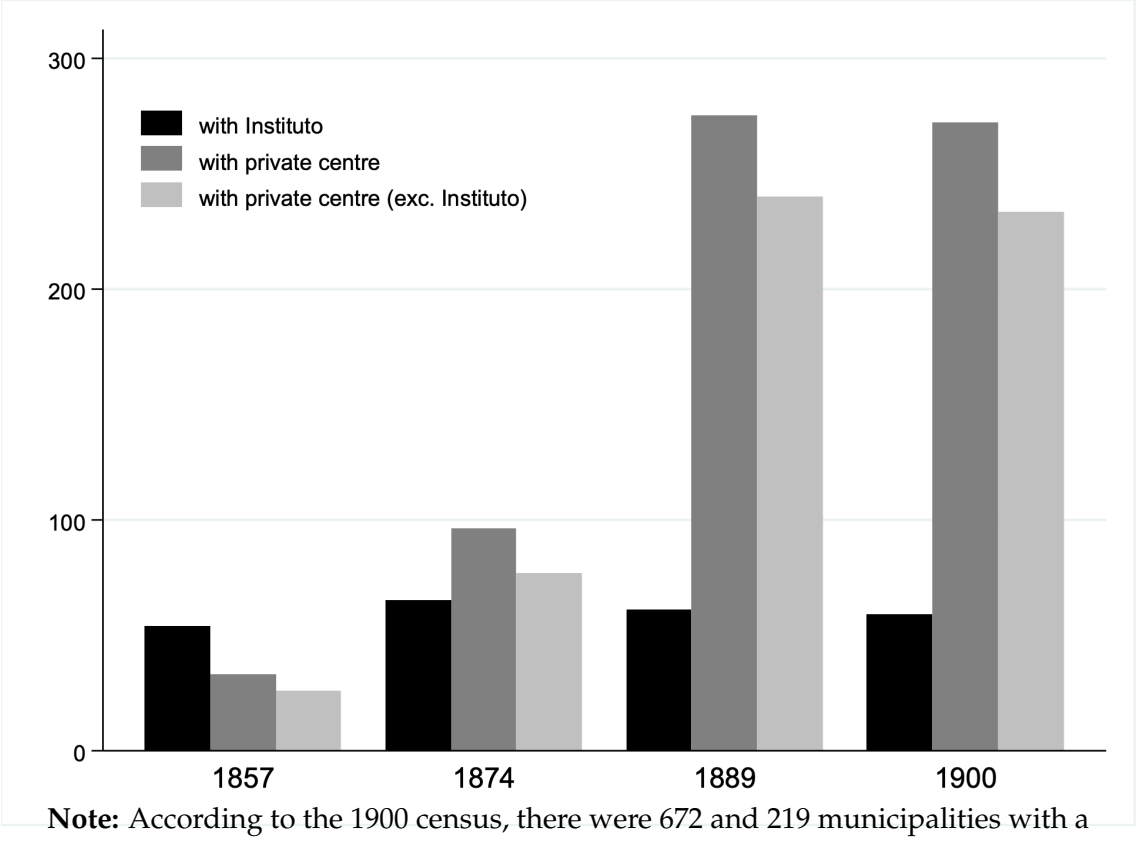
Figure 5.2 shows the number of municipalities with a public or a private school, while Maps 5.3 and 5.4 depicts the education system resulting from the Moyano Act and municipalities with direct access, or a private school, in 1857 and 1901. As a hierarchical structure, Spain was divided in 10 university districts where rectors were the leading educational authority.[9] Figure 5.2 confirms the rapid expansion of schools in late 19th century. Interestingly, around a third of the

[8] The information for 1858, 1874 and 1889 is then linked to the censuses of 1860, 1877 and 1887, respectively.

[9] Chapter V, Title II of the Ley Moyano (arts. 148–155) established the requirements to open a private school. In the *Institutos*, the catedráticos were responsible, among other things, for the examinations. For a detailed description of the role played by *catedráticos*, see Chapter 3.

municipalities with a public school had no private schools at the end of the period of study. Moreover, and as expected, private education targeted large cities. By 1901, there were 111 and 46 centres in the cities of Madrid and Barcelona, respectively.

Figure 5.2. Number of municipalities with secondary schools in Spain, 1857–1900.

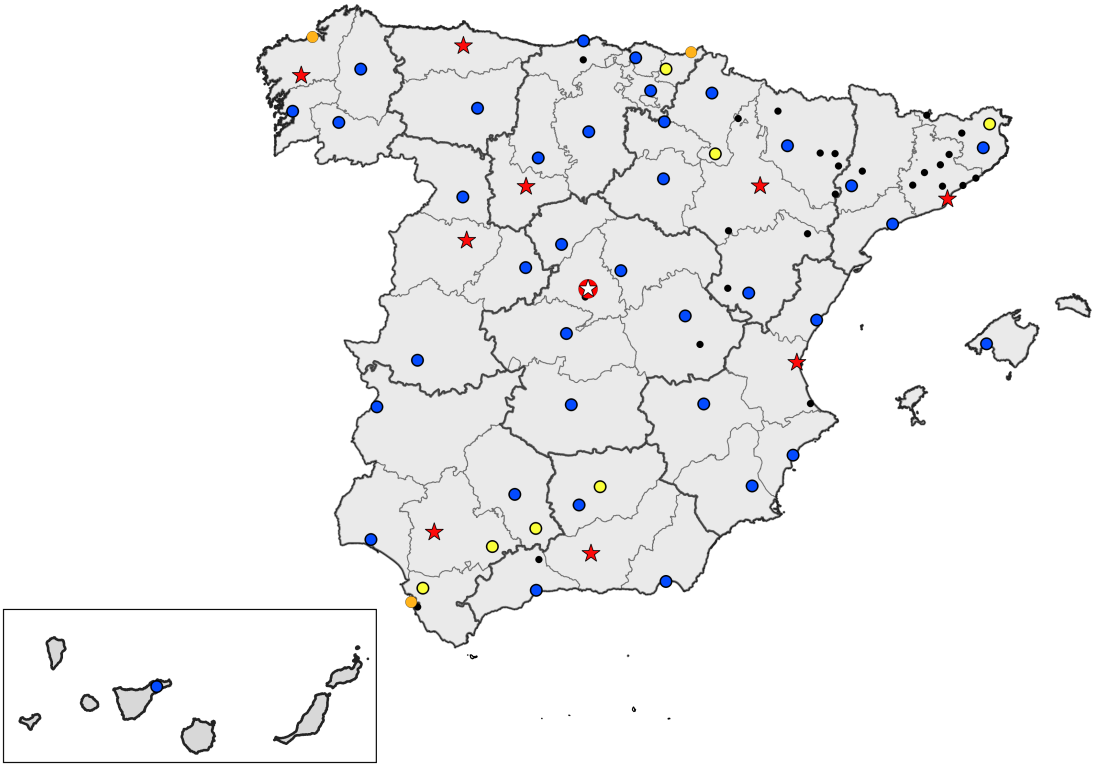


Note: According to the 1900 census, there were 672 and 219 municipalities with a population greater than 5000 and 10,000 inhabitants, respectively. **Source:** see text.

Then, the unit of analysis in this study is the municipality, the lowest administrative unit in Spain. Using the population censuses (1860, 1877, 1887, and 1900) we thus construct a panel dataset joining information on schools with data on population and literacy at the municipal-level from Beltrán-Tapia et al. (2019). To have a balanced panel we adjust for the territorial inconsistencies resulting from a distinct number of municipalities in each count. Following Goerlich et al. (2006) and Beltrán-Tapia et al. (2019), pseudo-municipalities were created to account for cases with territorial alterations. The dataset thus contains 7,905 municipalities. Using cartographic resources from the *Instituto Geográfico Nacional (IGN)*, municipalities were then georeferenced thereby permitting the computation of time-

invariant variables such as surface, elevation and geodesic distances. Also, we computed the distance from each municipal centre to its closest seaport. As seaports had distinct relevance, only seaports with a customs office, as specifed in the 1858 Statistical Yearbook, are considered. Seaports with customs office were classifed in classes according to their capacity. All seaports were allowed to export goods abroad, but only those in the first and second class were allowed to import goods. However, as all seaports with customs were authorised to host cabotage, we compute the distance to the closest seaport with customs office of any class. Similarly, we have also computed the distance from each municipal centre to the nearest public high school and ecclesiastical seminary in 1860, which in essence is seat of the diocese.

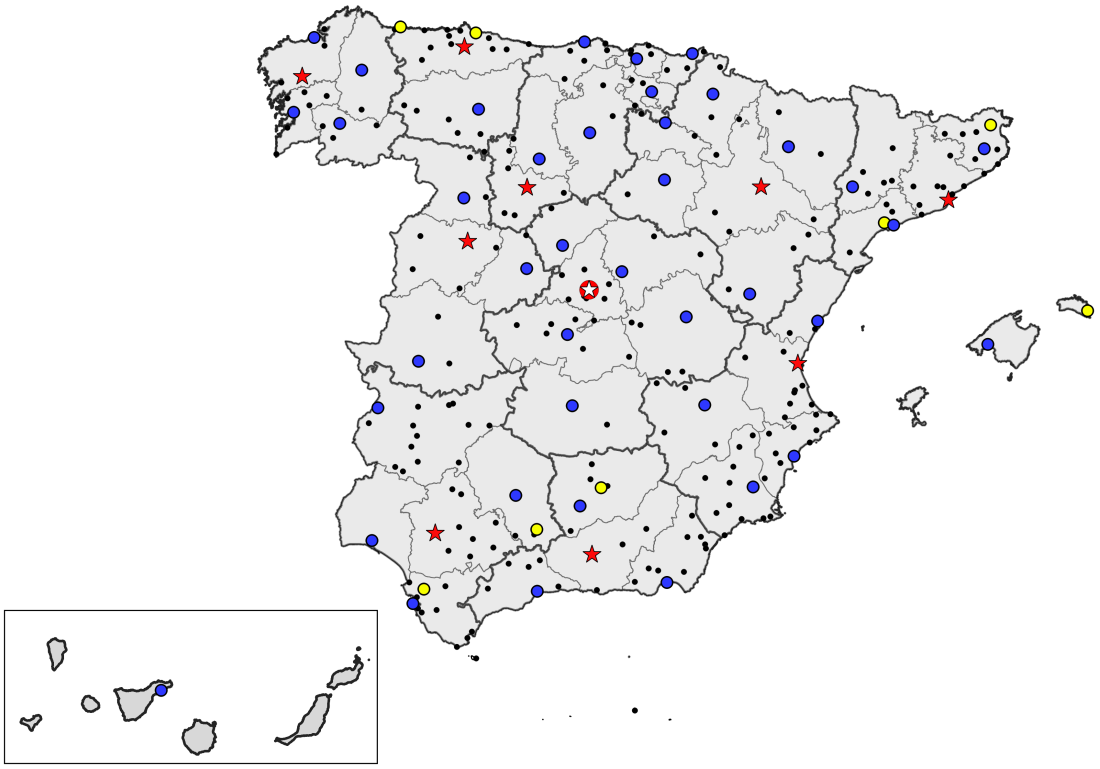
Figure 5.3. Municipalities with secondary schools in 1857.



Note: Red stars show the 10 university district capitals, which all have an Instituto. Blue circles, on the other hand, represent Institutos in provincial capitals, whereas yellow circles show non-capital municipalities with an Instituto. Orange circles show provincial capitals without an Instituto. Finally, black dots illustrate municipalities with at least one private centre. **Source:** see text.

Additionally, the existence of educational centres prior to 1857 must be taken

Figure 5.4. Municipalities with secondary schools in 1900.



Note: Red stars show the 10 university district capitals, which all have an Instituto. Blue circles, on the other hand, represent Institutos in provincial capitals, whereas yellow circles show non-capital municipalities with an Instituto. Orange circles show provincial capitals without an Instituto. Finally, black dots illustrate municipalities with at least one private centre. **Source:** see text.

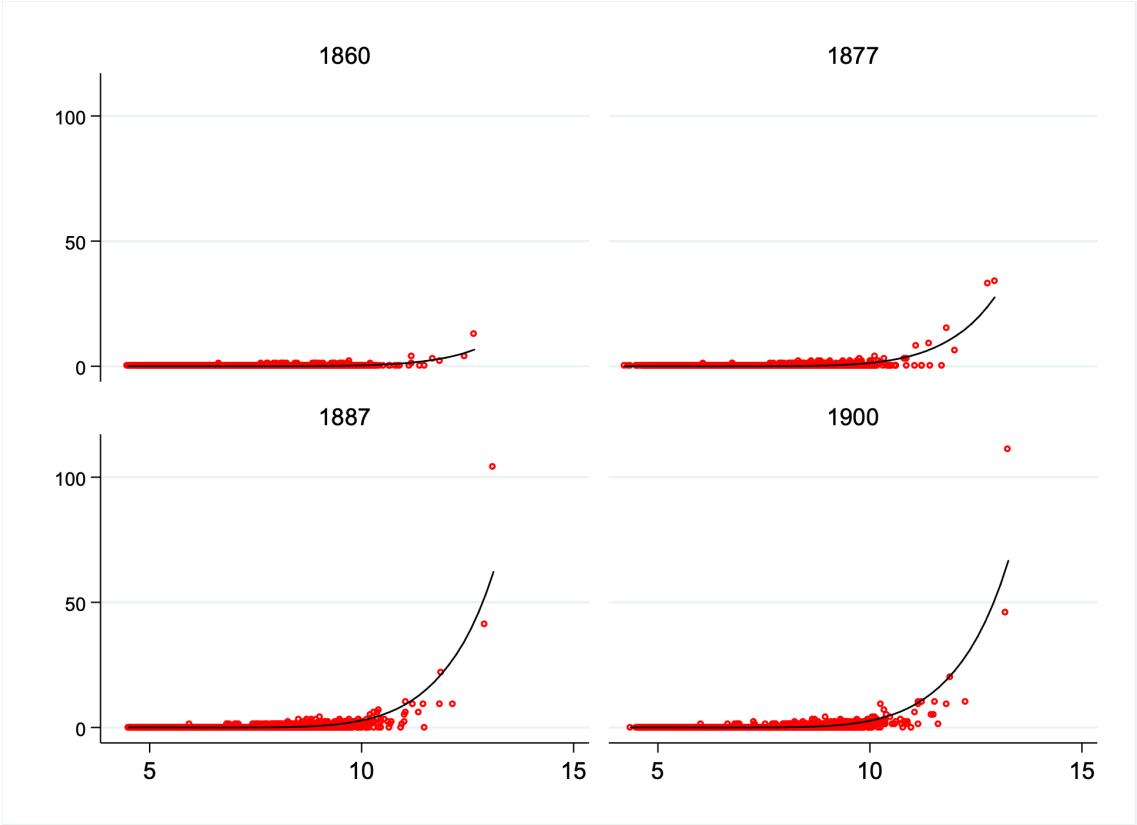
into account. To assess continuity in the spatial distribution, we gathered information on active universities in the late Old Regime. In doing so, we have contrasted information contained in the *Real Cédula, Jul. 12, 1807*, Gil de Zárate (1855) and Rodríguez San Pedro Bezares (2000) to identify them.[10] Overall, we find 34 municipalities that hosted a university at some point in early 19th century. To control for this, we compute the shortest distance from a given municipality to any of these municipalities. Likewise, it is known that the Church played a relevant role either funding or managing centres (seminaries, colleges...) and that its presence had an enormous impact. We have thus reconstructed the ecclesiastical administration to compute the shortest distance from a municipality to a seat of

[10] The *Real Cédula, Jul. 12, 1807* aimed at restructuring higher education by reducing the number of centres and implementing a curriculum for all (Gil de Zárate, 1855; Lorente, 1999). In addition, it ofered information on the existing centres.

a diocese, which was the hub of Church-related activity.

Lastly, as the development of an education system is one of the pillars of the Liberal State (Pro, 2019), we assess the role of the administrative structure.[11] For this, we control for the first-level or provinces (*provincias*) and the second-level or judicial districts (*partido judicial*). As the administration and judicature were instituted in the capitals of provinces and judicial districts, it is likely that State infrastructures influenced the entry decision of private initiatives. As a reference, Figure 5.5 shows the relationship between the number of private schools and municipal population (in logarithmic scale) by census.

Figure 5.5. Private schools and size of municipalities (in logarithmic scale) by year.



Note: The solid line represented a kernel-weighted local polynomial smoothing. Municipal size or population is in logarithmic scale. **Source:** see text.

[11] For an overview of the process of creation of provincias, see Burgueño (2011).

5.4 Methodology

As shown above, he size of the public school network did not change much from 1857 to 1901, but the number of private schools exploded. As we see it, and considering the circumstances described above, the decision to open a private school in a specific municipality can be compared to the decision of a firm to enter a market. In this way, when a firm operates it is signalling, through revealed preference, that it is profitable to exist, not only in accounting terms but also in economic ones. Yet, this can be analysed considering not only the firm's characteristics but also, and in a decisive way, the strategic behaviour that other firms could adopt (Berry and Reiss, 2007). Leaving prices and quantities aside, this approach makes use of intrinsic features of the market and aspects related to the degree of market competition as explanatory variables (Bresnahan and Reiss, 1990, 1991; Seim, 2006). Furthermore, the decision to open a private school might not only respond to the demand. Education is normally related to the transmission of knowledge and skills, but it also conveys the dissemination of specific values. Therefore, when funding and teaching are separated it is worth noting that the preferences of benefactors regarding educators mattered. In Spain, private initiatives normally required the support of wealthy families and local councils to acquire the materials, equipment, and facilities, to begin operations. Then, if some educators, such as Church-related initiatives, were more aligned with the preferences of the benefactors it could have affected the decision.

That said, our dependent variable y captures a new entry in municipality i over period t (1860-77; 1877-87; and 1887-1900), thereby taking the value of 1 if a new private school appeared and 0 otherwise. Then, we have a dataset with 7,905 municipalities and 3 waves (1877, 1887 and 1900) since we use information from year 1860 as the first lag. Panel data is particularly interesting for such an analysis as it permits the isolation of time-invariant effects, thereby mitigating possible omitted variable bias. Considering that our dependent variable is a binary variable, and in order to exploit the information gathered, we use a random-effects probit model in order to be able to capture the unobserved individual effects of each municipality. The specification is as follows:

$$P(y_{it}) = \Phi(\beta_0 + \beta_1 X_{it} + \beta_2 Z_i + \alpha_i + \gamma_t + u_{it}) \tag{5.1}$$

Where Φ is the normal cumulative distribution function (CDF), X_{it} is a vector of explanatory variables, Z_i is a vector of time-invariant observed heterogeneity while α_i captures the time-invariant unobserved heterogeneity, γ_t accounts for year-fixed effects and u_{it} is the error term. For the sake of simplicity, we classify explanatory variables into three categories. First, the demand for education is proxied with population size and male literacy (as students in secondary education during the period of study were essentially males). It is expected that larger and more literate municipalities would be targeted. Equally, socioeconomic dynamism might stimulate the demand. To capture this, we use municipal population growth.

We also control for the administrative structure and the degree of competition. On the one hand, a variable is included to capture whether a municipality was the seat of a judicial district. As the lowest level of the judicature, these municipalities became focal points of the economic, social and cultural life, and the nodes of the information network. Additionally, the presence of an *Instituto* or a private school might deter private initiatives. To measure this, we include a set of variables to capture the presence of a public school, a private school, and also, whether a private school existed within the judicial district at the beginning of each period. Finally, we include a vector Z_i of time-invariant control variables which includes municipal surface, elevation and a set of distances to the nearest port, seat of university district, public school, ecclesiastical seminary, and seat of an Old Regime university. We also include fixed effects for the 10 university districts stipulated in the Moyano Act of 1857. Considering that the university rector was the highest academic authority, this should help us to control for the specificities of each district. As an additional geographic control, we introduce a quadratic polynomial on latitude and longitude as a way of controlling for unobserved location-specific characteristics.

Likewise, since industrialisation was already under way, we control for a

number of variables related to the socio-economic context. First, we control for the share of the employment in agriculture. Although this is not available at the municipal-level, we use judicial district-level data.[12] Therefore, the share of employment in agriculture of a given judicial district is assigned to the municipalities belonging to it. Structural change at the national level was somewhat slow (see Table 5.1)), but it is worth remembering that there were sizable territorial disparities. Then, it is possible that industry and services could have further influenced the entry decision. In this regard, **?** found that the pre-existing stock of human capital was fundamental for the adoption of technology in Catalonia between 1830 and 1861. Yet, it seems that only relevant human capital, essentially that acquired informally and on-the-job training, mattered. Second, we control for railways accessibility, measured as the distance (in hours) from a municipality to the nearest station or stop (Esteban Oliver, 2020). Railways were one of the main signs of modernity and a crucial technology in the economic and political integration that came along industrialisation. Also, better transport, by facilitating the transmission of information, might stimulate further change. Then, if private initiatives targeted more modern places a negative relationship should arise.

5.5 Results

Table 5.2 shows the results for Equation 5.1 using a panel probit model for which the average marginal effects (AMEs) are reported. In column (1) the results for the baseline model are shown, whereas in columns (2) and (3) we include time-invariant observed heterogeneity and time fixed-effects. The empirical analysis is limited, due to data availability, to peninsular Spain, thereby excluding the Balearic and Canary Islands. The number of municipalities in each wave (1860-77; 1877-87; 1887-00) thus drops to 7,763. In addition, a measure of the goodness of fit, McFadden's Pseudo-R^2, computed as the difference between the model's

[12] The Spanish population censuses of 1860 and 1887 ofer detailed information at the judicial district level, including occupational structure. For the census of 1877, we have interpolated the values found in 1860 and 1887.

log-likelihood and that of the model with a constant only, is also reported for all regressions.

Table 5.2. Main results (whole sample).

	(1)	(2)	(3)
Population (log)	0.0195***	0.0229***	0.0237***
	(0.002)	(0.002)	(0.0021)
Annual population growth (%)	0.0027***	0.0023***	0.0018***
	(0.0007)	(0.0007)	(0.0007)
Male literacy (%)	0.0209***	0.0377***	0.0357***
	(0.0056)	(0.0098)	(0.0097)
Judicial district-capital (dummy)	0.0267***	0.0221***	0.0230***
	(0.0042)	(0.0038)	(0.0039)
Instituto (dummy)	-0.0106***	-0.0081**	-0.0084***
	(0.0017)	(0.0032)	(0.0031)
Private school (dummy)	-0.0023	-0.0044**	-0.0058**
	(0.0027)	(0.0023)	(0.0027)
Private school in district (dummy)	-0.0003	-0.0031	-0.0024
	(0.0027)	(0.0002)	(0.0020)
Socio-economic controls	Yes	Yes	Yes
Time-invariant controls	No	Yes	Yes
Time FE	No	No	Yes
Pseudo-R^2	0.4183	0.2911	0.2924
Municipalities	7,763	7,763	7,763
Observations	23,289	23,289	23,289

Dependent variable: New entry of a private centre in a municipality Probit (margins dy/dx). The time-invariant control variables include: ln municipal surface; ln municipal elevation; ln distance to nearest port; ln distance to nearest seat of university district; ln distance to nearest *Instituto*; ln distance to nearest *Seminario*; ln distance to nearest seat of an Old Regime university; quadratic polynomial on latitude and longitude; and university district fixed efects. Standard errors clustered at the province level. Significance levels: *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$.

The results can be summarised in three central ideas. First, private initiatives targeted large, more literate, and dynamic places. Irrespective of the specification, the probability of opening a school was greater and statistically significant in municipalities with a large potential. As State education remained relatively unchanged during the whole period of study, it appears that private enterprise responded to local demands and filled in the gaps. Relatedly, not only size appears

to matter. Judicial district capitals were, on average, much more likely to witness a new private school. As previously said, being the seat of a judicial district (*cabeza de partido*) had a great relevance since they were the pillars of the recently created Liberal State, in terms of presence of administrative and judicial institutions.[13] Understandably, and since post-elementary education was still open to a narrow elite, these municipalities became a target.

Secondly, and in line with the above findings, the existence of an *Instituto* or a private school reduced the probability of a new entry. This apparent lack of competition, except in the large cities (Madrid, Barcelona), might signal a rising demand for secondary education across space which raises further questions on its provision. Neither State nor private education was free of charge.[14] That is, not all could afford these educational services. Still, as the middle class was eventually dragged (**?**) accessibility remained an obstacle to human capital formation. From a business perspective, a school is a costly and risky enterprise. Besides, within a context in which illiteracy is widespread the potential pool of teachers should be limited thereby raising the cost of provision (Andrabi et al., 2013). Even more, and following the Moyano Act, entry regulation was asymmetric. While secular initiatives had to comply with certain requirements, religious ones enjoyed exceptions.

Then, understanding the interplay between local forces (funding) and educators (teaching) is at the core of the matter. As the "freedom of association" was guaranteed (Constitution of 1876; Associations Act of 1887) it seems that the expansion of private schools came along with the revival of the Church. In fact, given the mounting anticlerical movements that were pushing for secularisation

[13] While the number of provincial capitals remained unchanged (49) during the period of study, 1860–1900, the seats or capitals of judicial districts ranged from 471 to 476.

[14] Between 1857 and 1887, Institutos were essentially funded with their own resources (enrolment fees, rents, etc.) and/or by a local/provincial body (*Diputación provincial*, *Ayuntamiento*, etc.). By 1887, expenditure on secondary education, including *catedráticos*'s salaries, was incorporated by law into the budgetary plans of the government, while the debt contracted by the Institutos was seized in 1890. Notwithstanding this efort to financially support and secure Institutos, the total expenditure on secondary education did not increase from 1887 to 1901 (Díaz de la Guardia Bueno, 1988, pp. 465-66). The central government, through the advisory board of the *Real Consejo de Instrucción Pública*, essentially regulated matters related to curriculum and textbooks.

across Europe, Spain became a haven for religious institutes. Invited, and often funded, by local authorities or affluent families, the number of religious houses devoted to education (elementary, secondary) rapidly increased (Castells, 1973).[15] This is the case of the Jesuit school San José in Valladolid which received a private donation in 1881; or the Rocafort La Salle school in Barcelona under the patronage of the aristocrat Dorotea de Chopitea. Given the conditions, several Catholic institutes and associations found its mission in education.

Finally, we also assess whether the lack of progress and change, measured through the distance to the railways and agricultural employment, had an effect on the creation of new schools. Spain was still an agrarian economy at the turn of the 20th century, but progress and change occurred during the period of study. By 1901, the broad-gauge railway network was nearly completed whereas industrialization was underway though spatially concentrated in certain territories. Yet, the inclusion of such controls does not modify the behaviour of the main variables. It can be argued that vocational or technical training, instead of general studies as the ones we are focusing on in this paper, were of greater relevance. In fact, and although many industrial schools located in places with a manufacturing tradition,[16] *Institutos* usually endowed specific chairs (or *cátedras*); and even private schools, including Catholic ones, adapted to the specificities of each territory (Fullana and Ostolaza, 2007; Lozano López de Medrano, 2014).[17]

We also carry out some robustness checks in ordern to strengthen our empirical analysis. First, given that there is a vast number of small municipalities

[15] It has been estimated that at the turn of the twentieth century around 50% of the male regular clergy was involved in education (Morote, 1904). The secularisation of public instruction in other countries reinforced this process. In France, for instance, the Churches and State were separated in 1905. Unsurprisingly, several French religious institutes devoted to education (de la Salle Brothers, Marists, Marianists, etc.) opened houses in late nineteenth- and early twentieth-century Spain. As ecclesiastical historians have shown, the institutes devoted to education were in most cases foreign ones (Faubell Zapata, 1997).

[16] For the whole country, Lozano López de Medrano (2014) finds 24 and 67 technical schools in 1880 and 1895, respectively. Still, 15 out of the 24 in 1880 and 40 out of the 67 in 1895 were located in provincial capitals. That is, accessibility to technical training was even more limited than to general studies. See also Riera i Tuèbols (1993).

[17] Regarding the disciplinal specialisation of high school professors (see Chapter 3). Lozano López de Medrano (2014) finds that, following local demands, basic technical training was also incorporated in private (including Catholic) schools, whereas Fullana and Ostolaza (2007) argued that Catholic schools and modernisation went hand in hand in certain territories.

Table 5.3. Main results on a restricted sample of large municipalities.

	(4)	(5)	(6)	(7)
Population (log)	0.0465***	0.103***	0.173***	0.173***
	(0.0035)	(0.0081)	(0.0172)	(0.0224)
Annual population growth (%)	0.0035**	0.0063*	0.0091	0.0091
	(0.0015)	(0.0033)	(0.0065)	(0.0061)
Male literacy (%)	0.0587***	0.111***	0.278***	0.279***
	(0.0132)	(0.0282)	(0.0701)	(0.0766)
Judicial district-capital (dummy)	0.0421***	0.0795***	0.111***	0.111***
	(0.0046)	(0.0065)	(0.0146)	(0.0221)
Instituto (dummy)	-0.0159***	-0.0369***	-0.0818***	-0.0820***
	(0.0052)	(0.0128)	(0.0291)	(0.0280)
Private school (dummy)	-0.0123**	-0.0259*	-0.0315	-0.0316
	(0.0053)	(0.0139)	(0.0321)	(0.0289)
Private school in district (dummy)	-0.0027	-0.0008	-0.0007	-0.0069
	(0.0045)	(0.0098)	(0.0318)	(0.0205)
Socio-economic controls	Yes	Yes	Yes	Yes
Time-invariant controls	Yes	Yes	Yes	Yes
Time F.E.	Yes	Yes	Yes	Yes
Pseudo-R2	0.2813	0.2406	0.1417	0.14
Municipalities	3,996	1,720	698	696
Observations	11,988	5,160	2,094	2,088

Dependent variable: New entry of a private centre in a municipality Probit (margins dy/dx). The time-invariant control variables include: ln municipal surface; ln municipal elevation; ln distance to nearest port; ln distance to nearest seat of university district; ln distance to nearest *Instituto*; ln distance to nearest *Seminario*; ln distance to nearest seat of an Old Regime university; quadratic polynomial on latitude and longitude; and university district fixed efects. Standard errors clustered at the province level. Significance levels: *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$.

where it is unlikely that private initiatives emerged, the sample is restricted to those larger than 1,000, 2,500, 5,000, and 5,000 inhabitants without Madrid and Barcelona, see columns (4), (5), (6), and (7) in Table 5.3.[18] All specifications include time-invariant observed heterogeneity and time fixed-effects. It is worth stressing that cities and towns are also more likely to be less agrarian and have better rail accessibility. In general, the results are in line, in terms of sign and sta-

[18] The smallest municipalities with a private school were *El Rasillo de Cameros* (432 inhabitants), province of La Rioja; *Sant Andreu de la Barca* (864 inhabitants), province of Barcelona; and *Terque* (926 inhabitants), province of Almería.

tistical significance, with those in column (3). Still, once we restrict to the largest municipalities (more than 5,000 inhabitants, column 6) both the effect of population growth and competition, measured with the presence of private schools, vanishes. In the latter case, this might indicate that there was further room for more centres. More importantly, the effects remain sizable despite of the restriction and are unaltered when dropping Madrid and Barcelona (column 7), the largest cities. Even now, the seats of judicial districts were much more likely to witness a new entry, while municipalities with an Instituto, essentially provincial capitals, were less. In this case, the decrease in the Pseudo-R^2 measure can be explained by the progressive decrease in the size of the sample in the different specifications and the fact that it gets restricted to increasingly larger municipalities, which may reduce the explanatory capacity of the model insofar as it does not include specific circumstances that could have operated in the different cities.

Likewise, we perform another robustness check by including municipal population density instead of population while dropping population growth. Table 5.4 shows that, as expected, population density exhibited a positive and statistically significant relationship. Similarly, our previous findings also arise.

5.6 Conclusions

The findings of this chapter make us reflect on the consequences of the State's inability to increase the public network of high schools in terms of private competition. In this study, we have looked at the early years of secondary education in Spain, which offers a riveting account on the challenges that a weak State may face to broaden access. By 1857, a curriculum for each educational level and an infrastructure of State schools (universities, high schools...) had been created. Although poverty, illiteracy, and gender discrimination among other factors limited enrollment, the supply of education by the State soon proved inadequate as the expansion of private schools in late 19^{th} century suggests. Following demand-related aspects, Catholic and secular schools rapidly spread across space following the demand for education.

Table 5.4. Main results with population density as a regressor.

	(1)	(2)	(3)
Population density	0.0067***	0.0230***	0.0237***
	(0.0012)	(0.0017)	(0.0018)
Male literacy (share)	-0.0025	0.0380***	0.0360***
	(0.0054)	(0.0082)	(0.0086)
Judicial district-capital (dummy)	0.130***	0.0219***	0.0227***
	(0.0158)	(0.0027)	(0.0025)
Instituto (dummy)	0.0135*	-0.0077***	-0.0080***
	(0.0073)	(0.0028)	(0.0027)
Private school (dummy)	-0.0000	-0.0044	-0.0055*
	(0.0024)	(0.0027)	(0.0028)
Private school in district (dummy)	-0.0031	-0.0031	-0.0024
	(0.0023)	(0.0020)	(0.0024)
Socio-economic controls	Yes	Yes	Yes
Time-invariant controls	No	Yes	Yes
Time F.E.	No	No	Yes
Municipalities	7,763	7,763	7,763
Observations	23,289	23,289	23,289

As above in Table 5.3. Significance levels: *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$.

Although the funding of private schools was a costly and risky venture, it is likely that private initiatives received financial support from the local community which in turn points to the interplay between local forces and educators. Although our data do not permit a comprehensive assessment, the mounting significance of Catholic schools deserves further attention. On the one hand, it can be argued that local forces (council, wealthy families…) preferred dioceses and congregations as educators. It is worth remembering that entry-restrictions were far less restrictive than those for secular educators. Similarly, the Church was struggling to find its way in this changing environment. Then, and as qualitative studies have pointed, Catholic schools not only filled in the gap, they also actively participated in the transmission of bourgeois values (Fullana and Ostolaza, 2007, p. 213).

As we have previously explained, however, despite the fact that the private initiative seemed to target places with greater potential demand for its services,

creating a large number of schools in municipalities that had not previously had any school, the aggregate figures (see Chapter 2) do not show an absolute increase in the number of students, but rather a transfer of students from public to private schools. The hypotheses in this sense are various and would require a much more detailed analysis. In the first place, it is possible that many students chose to change to the private school because it provided them with a school closer to their place of origin and did not force them to move to the provincial capital, as was the case with the public school, with all the economic and family costs that this entailed. Another hypothesis that we suggest has to do with the divergence in the educational quality of the studies offered in public and private schools. According to data corresponding to the district of Madrid between 1860 and 1900, in private schools only 5% of students failed final exams, while in public schools this percentage was around 20-25%. If we consider the percentage of Distinction grades awarded, figures are reversed and represent around 10% in public schools, while they rise to 20% in private schools. This evidence, although it only refers to a single university district, suggests that many students may have left public high shools to enroll in private centers given more favorable prospects of completing the educational stage.

Chapter 6

Conclusions

The role of human capital in economic development continues to be a source of methodological debate among academics. The empirical verification of the theoretical results is enormously complicated due to the difficulty in finding variables that are capable of correctly approximating the object of study, which, by definition, is intangible. To this we must add the difficulties presented by the study of the role of human capital in contexts of structural change from a historical perspective, due to the limited amount of useful historical data and the need to combine strictly educational hypotheses with others that concern other aspects. of the society. Despite the methodological difficulties, the literature has shown that education, as a generator of human capital, could have played an important role in industrialization processes, thus confirming its importance for economic development and growth.

This doctoral thesis has aimed at providing new data and develop new hypotheses about the slow implementation of the secondary education system in Spain during the second half of the 19th century, in order to contribute to the debate about the slow industrialization in the country. In this regard, there have been many works and elaborated hypotheses regarding the different aspects of the economy that have been suggested with respect to the difficult Spanish industrialization since the pioneering proposal of Nadal (1975). However, until now no work has focused on the specific analysis of secondary education as an edu-

cational stage distinct from primary education, professional education or higher studies. Thus, our work has focused on trying to obtain a first comprehensive image of the Spanish secondary education system during the second half of the 19th century in order to establish some hypotheses about its evolution.

To do so, Chapters 2 and 3 of the thesis have focused on statistically reconstructing the secondary education network from the approval of the *Ley Moyano* in 1857 until the beginning of the 20th century. Even though the quantification of the network in terms of students, schools and teachers is a necessary first step to be able to study its evolution, until now we did not have systematic estimates of these variables at the provincial level. This thesis is the first to offer estimates of the number of students enrolled in secondary education, as well as of the gross enrollment rate for all the decades between 1860 and 1930. In absolute terms, the new estimates offer a picture of stagnation throughout the entire second half of the 19th century, since the total number of students barely exceeded 40,000 and the gross enrollment rate did not exceed 1%. In this regard, the evolution is similar to that suffered by technical education (Lozano López de Medrano, 2014). An estimate of the number of secondary schools, both public and private, between 1860 and 1900 has also been offered for the first time. The analysis of the number of schools reveals a notable asymmetry between the public network and the private network, a phenomenon that is studied in a later chapter. Thus, while the public network hardly grew between the approval of the *Ley Moyano* and the turn of the century, the number of private centers multiplied by 10.

Finally, in Chapter 3, the teaching staff in charge of teaching classes in secondary education has been quantified and described through the analysis of the main ranks of the body. This has allowed us to know the number of active professors, their specialty subjects and their destinations, as well as the internal dynamics in terms of promotions. All of this has allowed us to conclude that the public secondary education system could provide all the schools in the country with teachers of the basic subjects of the curriculum relatively quickly. In addition, the system of secondary education chairs allowed the recognition and scientific consolidation of some nascent disciplines, such as Agriculture, whose presence

throughout the Spanish provinces would have been much more complicated if it had not been for the network of public high schools. We trust that the estimates made for the variables referred to above can be useful to other researchers to continue the analysis of secondary education in a period as relevant for its development as the second half of the 19th century.

The following chapters of the thesis try to delve into the two phenomena that, in our opinion and as we pointed out in the Introduction, characterize to a greater extent the situation of secondary education in Spain during the study period. The first is the stagnation in the number of students and in gross enrollment to which we have referred above. The second has to do with the transfer of students from the public school to the private school that occurred before the notable increase in the number of private schools, especially from the 1880s decade. To broaden our understanding of both phenomena, we propose two issues that shed light on its causes.

The first one, which is addressed in Chapter 4, tries to delve into the causes of the system's inability to attract more students during the more than forty years that separate the approval of the *Ley Moyano* and the turn of the century. Even acknowledging the importance that low levels of literacy could have in this fact, the truth is that average literacy in Spain went from 20% to 35% between 1860 and 1900 (Beltrán-Tapia et al., 2019), as we know the number of students in secondary education barely grew. This leads us to think that the problem of low literacy was probably accompanied by other factors. The hypothesis that we try to demonstrate in this chapter is that the location of public institutes almost exclusively in provincial capitals imposed costs on students who, due to an eminently rural socioeconomic context, had more difficulties in accessing the educational system. Indeed, and after arguing that the high school graduation age is a good measure of the costs that a student would have to face during their time in the educational system, we are able to show that students from smaller municipalities faced much higher costs to pass secondary school than those from urban environments. This result suggests that the policy through which the location of public institutes was articulated in the provincial capitals could have slowed down the

popularization of the educational stage. This makes us think that the creation of public schools in other cities beyond the provincial capitals could have been beneficial for the educational stage.

This line of reasoning helps us to link with the second of the phenomena to which we referred above; the one that has to do with the notable increase in private schools and the transfer of students from the public network. Thus, in chapter 4 we study the pattern that private schools followed to establish themselves in the territory, focusing on the characteristics of the municipalities where they ended up establishing themselves. Although the extension of the private network as opposed to the public one did not manage to increase the number of students, it did achieve that most secondary school students were studying in private centers towards the end of the century. According to our argument, this is due to the fact that the private centers were established in municipalities other than the provincial capitals, where there was a demand for studies but where there had not been schools before. Indeed, the empirical analysis shows that the creation of new private centers occurred especially in those municipalities that had suffered a greater population growth and in those that had higher literacy rates, which arguably are also those in which we would find a greater demand of secondary education, since they also used to be where some infra-provincial administrative entities were based. According to our hypothesis, it is precisely the growth of the network and its exclusive abandonment of the provincial capitals would be the factor that would explain the enormous transfer of students from public to private schools. However, and despite the great territorial extension that was carried out by private schools, the number of students and the enrollment rate hardly changed until the first decade of the 20^{th} century.

In this sense, there are still many unknowns about the factors that prevented a greater number of students from accessing secondary education, despite the advances in literacy figures and the increase in the number of schools throughout the territory. In what follows we will venture some lines of research that, in our opinion, could be fruitful to achieve this purpose. In the first place, it would be convenient to analyze the value of the title obtained after passing the secondary

education, whether it was the *Bachiller* or the *Perito* degrees, in the labor market of the time. Were there specific jobs that had to be filled with personnel who had this qualification? What functions did these positions have? If this were so, then it might be interesting to quantify the skill premium among workers with a secondary education, unskilled workers, and workers with higher education. The existence —or not— of a skill premium associated with the qualifications awarded by secondary education would be extremely useful to better understand the dynamics of demand —or its absence— across Spanish regions.

Another aspect that should be analyzed is the educational quality and the contents of the curriculum taught in both public and private schools. As Squicciarini (2020) has recently shown, religious and political attitudes are decisive when it comes to influencing the educational content taught in schools. If education in technical subjects is affected by such censorship, it would be expected that we would observe a notable effect on industrial development. As we have discussed in chapter 3, it seems that the access and promotion system for public school teachers encouraged them to be prepared individuals capable of teaching their subject matter professionally. However, what happened in private schools? Did the teachers in private schools have the same level of training? In addition, and taking into account that a high percentage of private schools were somehow linked to Catholic schools, were there frictions between the contents set out in the official curriculum and Catholic doctrine? If so, how were they resolved? Finally, it would be convenient to clarify if there were differences in the difficulty of the studies between the public network and the private network, in case this could constitute one of the causes of the enormous transfer of students observed during the last two decades of the 19^{th} century.

Secondary education played a fundamental role in some countries of the world during the advent of the Second Industrial Revolution. Spain remained, in general, oblivious to these changes and experienced a slow and complicated industrialization process. Likewise, secondary education in Spain was slow to develop formally and, once it did in the mid-nineteenth century, it had little capacity to attract students and, ultimately, provide changes in society from the

perspective of human capital accumulation. These findings contribute to complete the theoretical explanation of the difficult Spanish industrialization and, of course, its long-term consequences on the country's economic development.

Bibliography

Alberdi Alberdi, R. (1980). *La formación profesional en Barcelona: política, pensamiento, instituciones (1875-1923)*. Barcelona: Don Bosco.

Alesina, A., P. Giuliano, and B. Reich (2021). Nation-building and education. *Economic Journal 131*, 2273–2303.

Allen, R. C. (2003). Progress and poverty in early modern europe. *Economic History Review 56*, 403–443.

Altava Rubio, M. V. (1993). *Aportaciones al estudio de la Enseñanza Media en Castellón, 1846-1900*. Ph. D. thesis, Departamento de Educación Comparada e Historia de la Educación-Universitat de València.

Anderson, R. (2004). The Idea of the Secondary School in Nineteenth-Century Europe. *Paedagogica Historica 40 (1/2)*, 93–106.

Andrabi, T., J. Das, and A. I. Khwaja (2013). Students today, teachers tomorrow: Identifying constraints on the provision of education. *Journal of Public Economics 100*, 1–14.

Araque, N. (2013). *Manuel José Quintana y la instrucción pública*. Madrid: Universidad Carlos III de Madrid.

Banks, O. (1955). *Parity and Prestige in English Secondary Education*. Routledge: London.

Barrios-Fernández, A. (2022). Neighbors' Effects on University Enrollment. *American Economic Journal: Applied Economics 14(3)*, 30–60.

Barro, R. (1991). Economic growth in a cross-section of countries. *Quarterly Journal of Economics 106*(2), 407–443.

Barro, R. and J. Lee (2013). A new data set of educational attainment in the world, 1950–2010. *Journal of Development Economics 104*, 184–198.

Barro, R. and J. W. Lee (1993). International comparisons of educational attainment. *Journal of Monetary Economics 32*, 363–394.

Barro, R. and J. W. Lee (1996). International measures of schooling years and schooling quality. *American Economic Review 86(2)*, 218–223.

Barro, R. and J. W. Lee (2001). International data on educational attainment: Updates and implications. *Oxford Economic Papers 53(3)*, 541–563.

Bartolomé Martínez, B. (1989). Las bibliotecas públicas provinciales (1835-1885): un intento de promoción de la lectura en España. *Revista de Educación 288*, 271–304.

Beltrán-Tapia, F. J., A. Díez-Minguela, J. Martinez-Galarraga, and D. A. Tirado-Fabregat (2019). *Capital humano y desigualdad territorial. El proceso de alfabetización en los municipios españoles desde la Ley Moyano hasta la Guerra Civil*. Banco de España: Madrid.

Beltrán-Tapia, F. J., A. Díez-Minguela, J. Martinez-Galarraga, and D. A. Tirado-Fabregat (2021). The uneven transition towards universal literacy in Spain, 1860–1930. *History of Education 50(5)*, 605–627.

Beltrán Tapia, F. J. and J. Martinez-Galarraga (2018). Inequality and education in pre-industrial economies: Evidence from Spain. *Explorations in Economic History 69*, 81–101.

Benso, C. (2002). Ser profesor de bachillerato. los inicios de la profesión docente (1836-1868). *Revista de Educación 329*, 291–309.

Benso Calvo, C. (1983). Genésis y problemática del funcionariado docente en España un aspecto de la política escolar del siglo XIX. *Historia de la educación 2*, 255–262.

Benso Calvo, C. (1994). Los destinatarios del Bachillerato en Galicia. Estudio geográfico y social del alumnado orensano (1850-1910). *Revista de Educación 305*, 321–352.

Benso Calvo, C. (1999). La historia social del profesorado en España. In J. Magalhães and A. Escolano (Eds.), *Os professores na história*, pp. 101–102. Porto: Sociedade Portuguesa de Ciencias da Educação.

Berry, S. and P. Reiss (2007). Empirical Models of Entry and Market Structure. In M. Armstrong and P. Porter (Eds.), *Handbook of Industrial Organization (volume 3)*. Amsterdam: Elsevier.

Betrán, C. and M. Pons (Eds.) (2020). *Historical turning points in Spanish economic growth and development, 1808–2008*. Cham: Palgrave.

Borrás Llop, J. M. (2013). Introducción: Una historia recuperada. las aportaciones de la infancia al crecimiento económico y a la subsistencia familiar. In J. M. Borrás Llop (Ed.), *El trabajo infantil en España (1700-1950)*. Barcelona: Icaria-Publicacions i Edicions de la Universitat de Barcelona.

Bowles, S. and H. Gintis (1976). *Schooling in capitalist America: educational reform and the contradictions of economic life*. New York: Basic Books.

Boyd, C. (1997). *Historia patria. Politics, History, and National Identity in Spain, 1875-1975*. Princeton: Princeton University Press.

Bresnahan, T. and P. Reiss (1990). Entry into monopoly markets. *Review of Economic Studies 57*, 531–553.

Bresnahan, T. and P. Reiss (1991). Entry and competition in concentrated markets. *Journal of Political Economy 95*, 977–1009.

Brunori, P., F. Palmisano, and V. Peragine (2019). Inequality of opportunity in sub-Saharan Africa. *Applied Economics 51*, 6428–6458.

Burgueño, J. (2011). *La invención de las provincias*. Madrid: Catarata.

Bénabou, R. (1996). Equity and efficiency in human capital investment: the local connection. *Review of Economic Studies 63*, 237–264.

Calatayud, S., J. Millán, and M. C. Romeo (Eds.) (2009). *Estado y periferias en la España del siglo XIX: Nuevos enfoques*. València: Publicacions de la Universitat de València.

Calatayud Giner, S. (1985). La difusión agronómica en la segunda mitad del siglo XIX: a propósito de la enseñanza agrícola. *Estudis d'Història Contemporània del País Valencià 6*, 165–194.

Canales Serrano, A. F. (2011). Innecesarios a todas luces. El desmantellament de la xarxa d'instituts en la postguerra. *Educació i Història: Revista d'Història de l'Educació 17*, 187–212.

Cano Pavón, J. (2001). *Estado, enseñanza industrial y capital humano en la España isabelina (1833-1868). Esfuerzos y fracasos*. Málaga: Imprenta Montes.

Carreras, A. and X. Tafunell (2021). *Between empire and globalization: an economic history of modern Spain*. Cham: Palgrave.

Cartañà, J., E. Mateu Tortosa, and S. Calatayud Giner (2004). Una agronomia en mutació. In J. Vernet and R. Parés (Eds.), *La ciència en la història dels Països Catalans, vol. 3*. València: Institut d'Estudis Catalans-Universitat de València.

Cartañà Piñén, J. (2005). *Agronomía e ingenieros agrónomos en la España del siglo XIX*. Barcelona: Ediciones del Serbal.

Castells, J. (1973). *Las asociaciones religiosas en la España contemporánea: Un estudio jurídico-administrativo (1767–1965)*. Madrid: Taurus.

Checchi, D. and V. Peragine (2010). Inequality of Opportunity in Italy. *Journal of Economic Inequality 8*, 429–450.

Cohen, D. and M. Soto (2007). Growth and human capital: Good data, good results. *Journal of Economic Growth 12*, 51–76.

Compère, M.-M. and P. Savoie (2001). L'établissement secondaire et l'histoire de l'éducation. *Histoire de l'éducation 90*, 1–12.

Congreso Nacional Pedagógico (1882). In *Congreso Nacional Pedagógico : actas de las sesiones celebradas, discursos pronunciados y memorias leidas y presentadas á la*

mesa, notas, conclusiones y demás documentos referentes á esta asamblea. Sociedad de Fomento de las Artes: Madrid.

Cruz Orozco, J. I. (2012). Los institutos de segunda enseñanza en España. Datos para su implantación (1835-1936). *Educatio Siglo XXI 30*(1), 233–252.

Cuesta, R. (1997). *Sociogénesis de una disciplina escolar: la Historia*. Barcelona: Pomares-Corredor.

Cuesta Fernández, R. and C. Mainer Baqué (2015). Guardianes de la tradición y esclavos de la rutina: historia del campo profesional de los catedráticos de instituto. *Historia y memoria de la educación 1*, 372n.

Cárcel Ortí, V. (1980). La lenta restauración de las órdenes religiosas en la España del siglo XIX. *Ephemerides Carmeliticae 31*, 431–537.

de Gregorio, J. (1996). Borrowing constraints, human capital accumulation, and growth. *Journal of Monetary Economics 37*, 49–71.

de la Cueva, J. and F. Montero (Eds.) (2007). *La secularización conflictiva: España (1898–1931)*. Madrid: Biblioteca Nueva.

de la Fuente, and R. Doménech (2006). Human capital in growth regressions: How much difference does data quality make? *Journal of the European Economic Association 4(1)*, 1–36.

de Pleijt, A. and J. Weisdorf (2017). Human capital formation from occupations: the 'deskinlling hypothesis' revisited. *Cliometrica 11*, 1–30.

de Puelles Benítez, M., P. de Blas Zabaleta, and F. Peiró (Eds.) (1996). *Política, legislación e instituciones en la educación secundaria*. Barcelona: ICE-Horsori.

De Witte, K., S. Cabus, G. Thyssen, W. Groot, and H. Maassen van den Brink (2013). A criticalreview of the literature on school dropout. *Educational Research Review 10*, 13–28.

Diebolt, C., C. Le Chapelain, and A. R. Menard (2021). Neither the elite, nor the mass. the rise of intermediate human capital during the french industrialization process. *Cliometrica 15*, 167–202.

Dittmar, J. (2019). The economic origins of modern science: technology, institutions and markets. *mimeo*.

Domínguez Rodríguez, E. (1991). *Cáceres y la enseñanza secundaria (1822-1869)*. Diputación Provincial de Cáceres: Cáceres.

Dowey, J. (2017). *Mind over matter: access to knowledge and the British industrial revolution*. Ph. D. thesis, London School of Economics and Political Science (LSE).

Dávila Balsera, P. (1997). *Las escuelas de artes y oficios y el proceso de modernización en el País Vasco, 1879-1929*. Bilbao: Universidad del País Vasco, Servicio Editorial-Euskal Herriko Unibertsitatea, Argitalpen Zerbitzua.

Díaz de la Guardia Bueno, E. (1988). *Evolución y desarrollo de la enseñanza media en España de 1875 a 1930. Un conflicto político-pedagógico*. Centro de Información y Documentación Educativa-Ministerio de Educación y Ciencia: Madrid.

Díez Benito, D. (2002). *Las escuelas estatales de artes y oficios, y la educación del obrero en España (1871-1900)*. Madrid: [s.n.].

Elías de Molins, A. (1889). *Diccionario biográfico y bibliográfico de escritores y artistas catalanes del siglo XIX*. Barcelona: Imprenta de Fidel Giró.

Erdozáin Azpilicueta, P. and F. Mikelarena Peña (1996). Algunas consideraciones acerca de la evolución de la población rural en España en el siglo XIX. *Historia Agraria 12*, 91–118.

Espejo, B. (2011). La proyección de la ilustración francesa en la formación profesional española. Génesis y desarrollo político de la formación profesional. In J. Hernández Díaz (Ed.), *Francia en la educación de la España contemporánea (1808-2008)*. Salamanca: Ediciones Universidad de Salamanca.

Esteban Oliver, G. (2020). The curse of geography? Railways and growth in Spain, 1877–1930. *Documentos de trabajo AEHE, DT-AEHE 2011*.

Faubell Zapata, V. (1997). Órdenes, congregaciones y asociaciones eclesiásticas masculinas dedicadas a la educación y enseñanza. In B. Bartolomé Martínez

(Ed.), *Historia de la acción educadora de la Iglesia en España (tomo II)*. Madrid: Biblioteca de Autores Cristianos.

Feldman, N. E. and K. van den Beek (2016). Skill choice and skill complementarity in eighteenth century england. *Explorations in Economic History 59*, 94–113.

Ferreira, F. (2001). Education for the masses? the interaction between wealth, educational and political inequalities. *Economics of Transition 9*, 533–552.

Ferreira, F. H. G. and J. Gignoux (2011). The Measurement of Inequality of Opportunity: Theory and an Application to Latin America. *Review of Income and Wealth 57*, 622–657.

Ferri Ramírez, M. (2015). *El ejército de la paz. Los ingenieros de caminos en la instauración del liberalismo en España (1833-1868)*. València: Publicacions de la Universitat de València.

Flecha García, C. (1998). La incorporación de las mujeres a los Institutos de Segunda Enseñanza en España. *Historia de la educación 17*, 159–178.

Florida, R. (2002). *The Rise of the Creative Class*. New York: Basic Books.

Franck, R. and O. Galor (2018). Technology-skill complementarity in the early phase of industrialization. *IZA Discussion Paper Series 9758*, 1–36.

Fullana, P. and M. Ostolaza (2007). Escuela católica y modernización. las nuevas congregaciones religiosas en España (1900–1930). In J. de la Cueva and F. Montero (Eds.), *La secularización conflictiva: España (1898–1931)*. Madrid: Biblioteca Nueva.

Galor, O. and J. Zeira (1993). Income distribution and macroeconomics. *Review of Economic Studies 60*, 35–52.

García Martín, F. (2019). *Los institutos locales en España (1842-1942)*. Almud: Bargas.

García Regidor, T. (1985). *La polémica sobre la secularización de la enseñanza en España (1902–1914)*. Madrid: Fundación Santa María.

Gennaioli, N., R. La Porta, F. Lopez de Silanes, and A. Shleifer (2013). Human capital and regional development. *Quarterly Journal of Economics 128*, 105–164.

Gil de Zárate, A. (1855). *De la instrucción pública en España, tomo II*. Madrid: Imprenta del Colegio de Sordomudos.

Go, S. and P. Lindert (2010). The uneven rise of American public schools to 1850. *Journal of Economic History 70(1)*, 1–26.

Goerlich, F., M. Mas, J. Azagra, and P. Chorén (2006). *La localizacion de la población española sobre el territorio. Un siglo de cambios (Un estudio basado en series homogéneas 1900–2001)*. Bilbao: Fundacióm BBVA.

Goldin, C. (2016). Human capital. In *Handbook of Cliometrics*. Heidelberg: Springer Verlag.

Goldin, C. and L. Katz (1998). The origins of technology-skill complementarity. *Quarterly Journal of Economics 113(3)*, 693–732.

Goldin, C. and L. Katz (1999). Human capital and social capital: The rise of secondary schooling in America, 1910–1940. *Journal of Interdisciplinary History 29(4)*, 683–723.

Goldin, C. and L. F. Katz (2008). *The Race between Education and Technology*. Belknap Press: Harvard.

González-Val, R., D. Tirado-Fabregat, and E. Viladecans-Marsal (2017). Market potential and city growth: Spain 1860–1960. *Cliometrica 11(1)*, 31–61.

Gozálvez Pérez, V. and G. Martín-Serrano Rodríguez (2016). El censo de la población de España de 1860. Problemas metodológicos. Inicio de la aportación social de los censos. *Boletín de la Asociación de Geógrafos Españoles 70*, 329–370.

Guereña, J.-L. (1988). La estadística escolar en el siglo XIX. *Historia de la educación 7*, 137–147.

Guereña, J.-L. and A. Viñao Frago (1996). *Estadística escolar, proceso de escolarización y sistema educativo nacional en España (1750-1850)*. Barcelona: EUB.

Gutek, G. L. (1995). *A History of the Western Educational Experience*. Long Grove: Waveland Press.

Hanushek, E. and D. Kimko (2000). Schooling, labor-force quality, and the growth of nations. *American Economic Review 90(5)*, 1184–1208.

Hanushek, E. and L. Woessmann (2008). The role of cognitive skills in economic development. *Journal of Economic Literature 46(3)*, 607–668.

Hanushek, E. and L. Woessmann (2012). Do better schools lead to more growth? cognitive skills, economic outcomes, and causation. *Journal of Economic Growth 17*, 267–321.

Hernández Díaz, J. M. (1986). Los alumnos de segunda enseñanza en el siglo xix. *Historia de la educación 5*, 251–274.

Hoxby, C. and C. Avery (2013). The Missing "One-Offs": The Hidden Supply of High-Achieving, Low-Income Students. *Brooking Papers on Economic Activity*, 1–50.

Humphries, J. (2003). English apprenticeship: A neglected factor in the first industrial revolution. In P. A. David and M. Thomas (Eds.), *The Economic Future in Historical Perspective*. Oxford: Oxford University Press.

Humphries, J. (2010). *Childhood and child labour in the British industrial revolution*. Cambridge University Press: Cambridge.

Jacobs, J. (1969). *The Economy of Cities*. New York: Random House.

Jiménez Asensio, R. (1989). Cuerpos generales versus cuerpos especiales: la fragmentación de la función pública española en el siglo xix. *Revista Vasca de Administración Pública-Herri Arduralaritzako Euskal Aldizkaria 23*, 81–110.

Kelly, M., J. Mokyr, and C. Ó Gráda (2014). Precocious albion: A new interpretation of the british industrial revolution. *Annual Review of Economics 6*, 363–389.

Koenker, R. (2005). *Quantile Regression*. Cambridge University Press: Cambridge.

Koenker, R. and G. Bassett (1978). Regression quantiles. *Econometrica 46(1)*, 33–50.

Krueger, A. and M. Lindahl (2001). Education for growth: Why and for whom? *Journal of Economic Literature 39(4)*, 1101–1136.

Laverde Ruiz, G. (1868). *Ensayos críticos sobre filosofía, literatura e instrucción pública españolas*. Lugo: Imprenta de Soto Freire.

Lee, J. and H. Lee (2016). Human capital in the long-run. *Journal of Development Economics 122*, 147–169.

Llombart, V. and J. Astigarraga (2000). Las primeras "antorchas de la economía": las sociedades económicas de amigos del país en el siglo XVIII. In E. Fuentes Quintana (Ed.), *Economía y economistas españoles, vol. 3*. Barcelona: Galaxia Gutenberg-Círculo de Lectores.

Lorente, L. (1999). *La Real y Pontifcia Universidad de Toledo, siglos XVI–XIX*. Cuenca: Universidad de Castilla-La Mancha.

Lozano López de Medrano, C. (2007). *Ideología, política y realidad económica en la formación profesional industrial española (1857-1936)*. Lleida: Fundació Ernest Lluch y Editorial Milenio.

Lozano López de Medrano, C. (2014). *Formación profesional obrera e industrialización, 1857-1936*. Ph. D. thesis, Departament d'Història i Institucions Econòmiques-Universitat de Barcelona.

Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics 22*, 3–42.

López Martín, R. (1994). *Ideología y educación en la dictadura de Primo de Rivera*. Valencia: Universidad de Valencia.

López-Sidro López, A. (2003). *El control estatal de las entidades religiosas a través de los registros: un estudio histórico jurídico*. Jaén: Universidad de Jaén.

Macías Picavea, R. (1882). *Apuntes y estudios sobre la instrucción pública en España y sus reformas*. Librería de Hernando: Madrid.

Mankiw, G., P. Romer, and D. N. Weil (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics 107*, 407–437.

Marrero, G. A. and J. G. Rodríguez (2013). Inequality of opportunity and growth. *Journal of Development Economics 104*, 17–122.

Martín Jiménez, I. (1994). *El sistema educativo de la Restauración en el distrito universitario de Valladolid (1875-1900)*. Junta de Castilla y León: Valladolid.

Mazrekaj, D. and K. De Witte (2020). The effect of modular education on school dropout. *British Educational Research Journal 46(1)*, 92–121.

McCloskey, D. (2010). *Bourgeois dignity: Why economics can't explain the modern world*. Chicago, IL: University of Chicago Press.

Meisenzahl, R. R. and J. Mokyr (2012). The rate and direction of invention in the british industrial revolution: Incentives and institutions. In J. Lerner and S. Stern (Eds.), *The Rate and Direction of Inventive Activity Revisited*. Chicago: University of Chicago Press.

Mejía, D. and M. St-Pierre (2008). Unequal opportunities and human capital formation. *Journal of Development Economics 86*, 395–413.

Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy 66(4)*, 281–302.

Mincer, J. (1962). On the job training: Costs, returns and some implications. *Journal of Political Economy 70*, 50–79.

Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press.

Mitch, D. (1993). The role of human capital in the first industrial revolution. In J. Mokyr (Ed.), *The British Industrial Revolution: An Economic Perspective*. Boulder, CO: Westview.

Mitch, D. (1999). The role of education and skill in the british industrial revolution. In J. Mokyr (Ed.), *The British Industrial Revolution: An Economic Perspective (2nd edition)*. Boulder, CO: Westview.

Mokyr, J. (2004). *The Gifts of Athena: Historical Origins of the Knowledge Economy*. Princeton, NJ: Princeton University Press.

Mokyr, J. (2005). The intellectual origins of modern economic growth. *Journal of Economic History 65*.

Mokyr, J. (2008). The institutional origins of the industrial revolution. In E. Helpman (Ed.), *Institutions and Economic Performance*. Cambridge, MA: Harvard University Press.

Mokyr, J. (2017). *A culture of growth: the origins of the modern economy*. Princeton University Press: Princeton.

Mokyr, J. and H. J. Voth (2009). Understanding growth in early modern europe. In S. Broadberry and K. O'Rourke (Eds.), *The Cambridge Economic History of Europe*. Cambridge: Cambridge University Press.

Monés i Pujol-Busquets, J. (1991). *Les escoles professionals municipals: 1890-1990*. Barcelona: Ajuntament de Barcelona.

Monés i Pujol-Busquets, J. (2005). *Formació professional i desenvolupament econòmic i social català (1714-1939)*. Barcelona: Institut d'Estudis Catalans-SHEPLC.

Morote, L. (1904). *Los Frailes en España*. Madrid: Imprenta de Fortanet.

Nadal, J. (1975). *El fracaso de la Revolución Industrial en España, 1814-1913*. Ariel: Barcelona.

Nadal, J. (1996). El factor humà en el retard econòmic espanyol. El debat entre els historiadors. *Revista econòmica de Catalunya 29*, 9–14.

Negrín Fajardo, O. (1983a). Algunas características de la enseñanza secundaria española decimonónica a través de la legislación. *Historia de la Educación 2*, 275–286.

Negrín Fajardo, O. (1983b). La enseñanza secundaria española en el siglo XIX. notas legales. *Cuadernos de Pedagogía 99*, 51–57.

Nicholas, S. J. and J. M. Nicholas (1992). Male literacy, 'deskilling' and the industrial revolution. *Journal of Interdisciplinary History 23*, 1–18.

Nuvolari, A., G. Tortorici, and M. Vasta (2023). British-french technology transfer from the revolution to louis philippe (1791-1844): evidence from patent data. *Journal of Economic History forthcoming*.

Núñez, C. E. (1992). *La fuente de la riqueza: Educación y desarrollo económico en la España contemporánea*. Madrid: Alianza Universidad.

Núñez, C. E. (2005). Educación. In A. Carreras and X. Tafunell (Eds.), *Estadísticas históricas de España: siglos XIX-XX*. Bilbao: Fundación BBVA.

Oreopoulos, P. and K. G. Salvanes (2011). Priceless: The nonpecuniary benefts of schooling. *Journal of Economic Perspectives 25*, 159–184.

Ostolaza Esnal, M. (2000). *Entre religión y modernidad: los colegios de las congregaciones religiosas en la construcción de la sociedad guipuzcoana contemporánea, 1876-1931*. Bilbao: Universidad del País Vasco.

Otero Carvajal, L. E. and S. de Miguel Salanova (Eds.) (2022). *La educación en España. El salto adelante, 1900-1936*. Madrid: Catarata.

Pan-Montojo, J. (1993). Fuentes estadísticas. In M. Artola (Ed.), *Historia de España*, Volume 7. Alianza: Madrid.

Pan-Montojo, J. (2007). De la agronomía a la ingeniería agronómica: la reforma de la agricultura y la sociedad rural españolas, 1855–1931. *Áreas. Revista Internacional de Ciencias Sociales 26*, 75–93.

Parente, P. and J. Santos Silva (2016). Quantile Regression with Clustered Data. *Journal of Econometric Methods 5(1)*, 1–15.

Pilz, M., J. Li, R. Canning, and S. Minty (2018). Modularisation approaches in Initial Vocational Education: evidence for policy convergence in Europe? *Journal of Vocational Education Training 70(1)*, 1–26.

Prados de la Escosura, L. (2017). *Spanish economic growth, 1850-2015*. Cham: Palgrave.

Prados de la Escosura, L. and J. Rosés (2010). Human capital and economic growth in Spain, 1850–2000. *Explorations in Economic History 47*, 520–532.

Pro, J. (2019). *La construcción del estado en España: una historia del siglo XIX*. Madrid: Alianza.

Ramsey, P. J. (2014). Toiling Together for Social Cohesion: International Influences on the Development of Teacher Education in the United States. *Paedagogica Historica 50 (1/2)*, 109–122.

Riera i Tuèbols, S. (1993). Industrialization and technical education in Spain, 1850–1914. In R. Fox and A. Guagnini (Eds.), *Education, technology and industrial performance in Europe, 1850–1939*. Cambridge: Cambridge University Press.

Rodríguez Campomanes, P. (1775). *Discurso sobre la educación popular de los artesanos y su fomento*. Madrid: Imprenta de Antonio Sancha.

Rodríguez San Pedro Bezares, L. E. (2000). Las universidades hispanas en la edad moderna: un balance. In *Las universidades hispánicas. De la monarquía de los Austrias al centralismo liberal. V Congreso Internacional sobre Historia de las Universidades Hispánicas, Salamanca, 1998*. Salamanca: Junta de Castilla y León-Universidad de Salamanca.

Roemer, J. E. and A. Trannoy (2016). Equality of Opportunity: Theory and Measurement. *Journal of Economic Literature 54*, 1288–1332.

Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy 94*(5), 1002–1037.

Romer, P. (1987). Growth based on increasing returns due to specialization. *American Economic Review 77(2)*, 56–62.

Romer, P. (1990). Endogenous technological change. *Journal of Political Economy 98(5)*, S71–S102.

Rosés, J. (1998). Measuring the contribution of human capital to the development of the catalan factory system (1830-61). *European Review of Economic History 2*, 25–48.

Rosés, J., J. Martinez-Galarraga, and D. A. Tirado (2010). The upswing of regional income inequality in Spain (1860–1930). *Explorations in Economic History 47*, 244–257.

Rosés, J. R. and B. Sánchez-Alonso (2004). Regional wage convergence in Spain, 1850-1930. *Explorations in Economic History 41*(4), 404–425.

Ruiz Berrio, J. (2008). El Plan Pidal de 1845: los institutos públicos, dinamizadores de las capitales de provincia. *CEE Participación Educativa 7*, 28–38.

Ruiz Rodrigo, C. (2013). *La fábrica o la escuela. Trabajo infantil y educación protectora en la España de los siglos XIX y XX*. Madrid: Dykinson.

Ruiz Rodrigo, C. and I. Palacio Lis (1983). Iglesia y educación en la España decimonónica: política concordataria (1851). *Historia de la educación 2*, 287–298.

Rumeu de Armas, A. (1980). *Ciencia y tecnología en la España ilustrada: la escuela de caminos y canales*. Madrid: Turner.

Sanz Díaz, F. (1985). *La segunda enseñanza oficial en el siglo XIX (1834–1874)*. Madrid: Ministerio de Educación y Ciencia.

Savoie, P. (2003). The Role of Cities in the History of Schooling: A French Paradox (Nineteenth–Twentieth Centuries). *Paedagogica Historica 39 (1/2)*, 37–51.

Savoie, P. (2013). *La construction de l'enseignement secondaire français (1802–1914). Aux origines d'un service public*. ENS éditions: Lyon.

Savoie, P., A. Bruter, and W. Frijhoff (2004). Secondary Education: Institutional, Cultural and Social History. *Paedagogica Historica 40 (1/2)*, 9–14.

Schultz, T. W. (1961). Investment in human capital. *American Economic Review 51(1)*, 1–17.

Scott, A. J. (1997). The Cultural Economy of Cities. *International Journal of Urban and Regional Research 21(2)*, 323–339.

Seim, K. (2006). An empirical model of frm entry with endogenous product-type choices. *RAND Journal of Economics 37(3)*, 619–640.

Silvestre, J. (2001). Viajes de corta distancia: una visión espacial de las migraciones interiores de España, 1877-1930. *Revista de Historia Económica-Journal of Iberian and Latin American Economic History 19*(2), 247–283.

Silvestre, J. (2010). Las emigraciones interiores en españa, 1860-2007 (I). *Historia y Política 23*, 113–134.

Sirera Miralles, C. (2011). *Un título para las clases medias: el instituto de bachillerato Lluís Vives de Valencia, 1859-1902*. València: Publicacions de la Universitat de València.

Squicciarini, M. (2020). Devotion and development: religiosity, education, and economic progress in nineteenth-century France. *American Economic Review 110(11)*, 3454–3491.

Squicciarini, M. P. and N. Voigtländer (2015). Human capital and industrialization: Evidence from the age of enlightenment. *Quarterly Journal of Economics 30(4)*, 1825–1883.

Sánchez de la Campa, J. M. (1874). *Historia filosófica de la instrucción pública en España desde sus primitivos tiempos hasta el día, tomo II*. Burgos: Imprenta de D. Timoteo Arnáiz.

Sánchez Pascua, F. (1985). *El instituto de segunda enseñanza de Badajoz en el siglo XIX (1845-1900)*. Diputación Provincial de Badajoz: Badajoz.

Tarrós i Esplugas, R. (1995a). Les primeres oposicions a catedràtics de l'institut de Barcelona (1846). *Educació i Història 2*, 35–40.

Tarrós i Esplugas, R. (1995b). Reformes proposades a l'ensenyament secundari pels professors dels instituts dependents de la Universitat de Barcelona el 1881. *Educació i Història 2*, 50–55.

Tiana Ferrer, A. (2021). *Las misiones pedagógicas: educación popular en la Segunda República*. Catarata: Madrid.

UNESCO (1958). *World Survey of Education: Primary Education*. Paris: UNESCO.

UNESCO (1961). *World Survey of Education: Secondary Education*. Paris: UNESCO.

UNESCO (1966). *World Survey of Education: Tertiary Education*. Paris: UNESCO.

van der Beek, K. (2014). England's eighteenth century demand for high-quality workmanship: Evidence from apprenticeship, 1710-1770. In A. Greif, L. Kiesling, and J. Nye (Eds.), *Institutions, Innovation, and Industrialization: Essays in Economic History and Development*. Princeton: Princeton University Press.

Villacorta Baños, F. (2003). Los ateneos liberales: política, cultura y sociabilidad intelectual. *Hispania LXIII(2)*, 415–442.

Villacorta Baños, F. (2012). El profesorado de segunda enseñanza, 1587-1936: estructuras, carrera profesional y acción colectiva. In L. López-Ocón Cabrera, S. Aragón, M. Pedrazuela Fuentes, and J. Juaristi (Eds.), *Aulas con memoria: ciencia, educación y patrimonio en los institutos históricos de Madrid (1837-1936)*, pp. 245–264. Madrid: CEIMES.

Viñao Frago, A. (1982). *Política y educación en los orígenes de la España contemporánea*. Madrid: Siglo XXI.

Viñao Frago, A. (1990). Espacios masculinos, espacios femeninos. El acceso de la mujer al Bachillerato. In *Mujer y educación en España. 1868-1975: VI Coloquio de Historia de la Educación*. Universidade de Santiago de Compostela: Santiago de Compostela.

Viñao Frago, A. (1994). Escuelas de gramática e institutos de segunda enseñanza. In B. Delgado Criado (Ed.), *Historia de la educación en España y América, volumen 3: La educación en la España contemporánea (1789-1975)*, pp. 153. SM-Morata: Madrid.

Viñao Frago, A. (1996). La crisis del Bachillerato tradicional y la génesis de la Educación Secundaria: ¿necesidad o virtud? In M. N. Gómez García (Ed.), *Pasado, presente y futuro de la educación secundaria en España*. Kronos: Sevilla.

Viñao Frago, A. (2008). Escolarización, edificios y espacios escolares. *CEE Participación Educativa 7*, 16–27.

Viñao Frago, A. (2010). La educación secundaria. In J.-L. Guereña, J. Ruiz Berrio, and A. Tiana Ferrer (Eds.), *Nuevas miradas historiográficas sobre la educación en la España de los siglos XIX y XX*. Ministerio de Educación: Madrid.

Zeev, N. B., J. Mokyr, and K. van der Beek (2017). Flexible supply of apprenticeship in the british industrial revolution. *The Journal of Economic History 77(1)*, 208–250.

Appendix A

Maps

Figure A.1. Spanish provinces

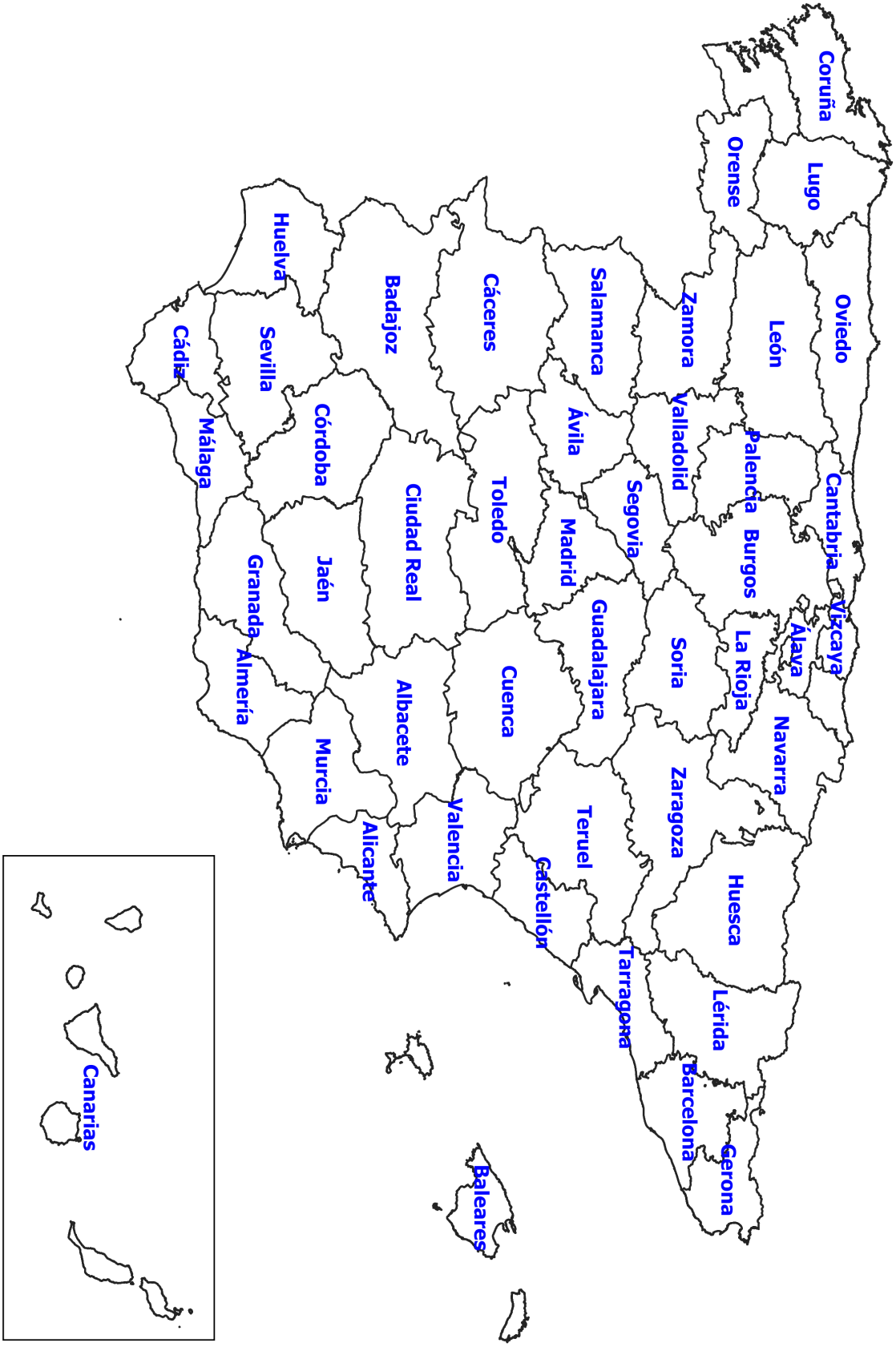
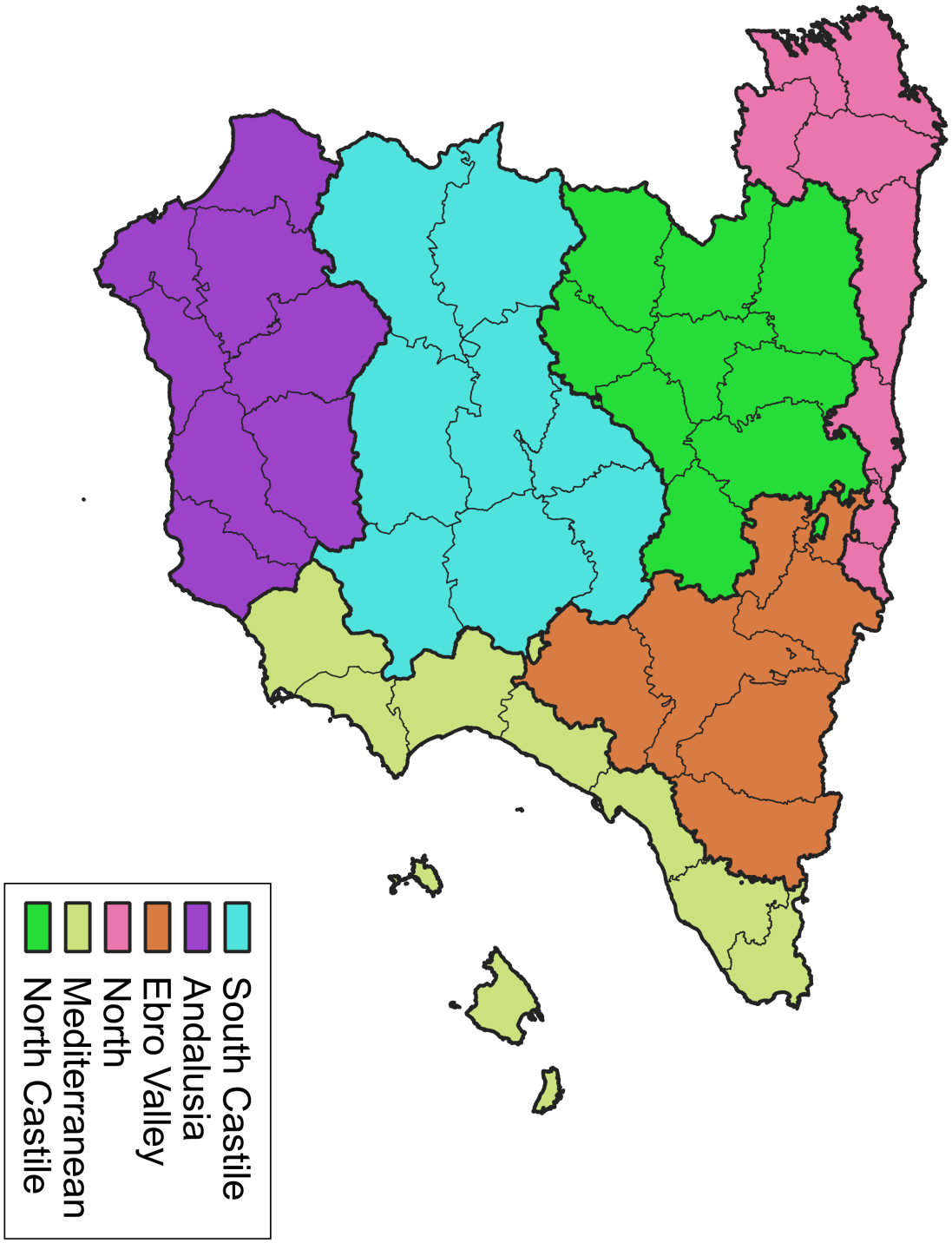


Figure A.2. Rosés and Sánchez-Alonso (2003) Spanish macroregions.



Source: Rosés and Sánchez-Alonso (2004).

Appendix B

Primary and archival sources

B.1 Primary sources

Anuario estadístico de España publicado por la Junta General de Estadística, 1860-1861 (Madrid: Imprenta Nacional, 1862-63)

Anuario histórico-estadístico-administrativo de la instrucción pública en España correspondiente al curso de 1873-74 publicado por la dirección de la Gaceta (Madrid: Imprenta Nacional, n.d.)

Anuario estadístico de instrucción pública correspondiente á 1890 publicado por la Inspección General de Enseñanza (Madrid: Establecimiento Tipográfico de Ricardo Fé, 1891)

Anuario estadístico de instrucción pública correspondiente á 1891 publicado por la Inspección General de Enseñanza (Madrid: Imprenta y Fundición de Manuel Tello, 1892)

Anuario estadístico de instrucción pública correspondiente al curso de 1900-1901, con avances de 1902 y 1903 publicado por la Sección de Estadística del Ministerio (Madrid: Ministerio de Instrucción Pública y Bellas Artes, 1904)

Anuario estadístico de instrucción pública correspondiente al curso de 1909-1910 y matrícula oficial de 1910-1911 publicado por la Subsecretaría del Ministerio (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1912)

Anuario Estadístico de España (año VII.- 1921-1922) (Madrid: Ministerio de Trabajo, Comercio e Industria, 1923)

Anuario Estadístico de España (año XV.- 1929) (Madrid: Ministerio de Trabajo y Previsión, 1931)

Censo de la población de España según el recuento verificado en 25 de diciembre de 1860 por la Junta General de Estadística (Madrid: Imprenta Nacional, 1863)

Censo de la población de España según el empadronamiento hecho en 31 de diciembre de 1877 por la Dirección General del Instituto Geográfico y Estadístico(Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1883)

Censo de la población de España según el empadronamiento hecho en 31 de diciembre de 1887 por la Dirección General del Instituto Geográfico y Estadístico (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1891)

Censo de la población de España según el empadronamiento hecho en la Península é Islas Adyacentes el 31 de diciembre de 1900 (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1902)

Censo de la población de España según el empadronamiento hecho en la Península é Islas Adyacentes el 31 de diciembre de 1910 (Madrid: Imprenta de la Dirección General del Instituto Geográfico y Estadístico, 1913)

Censo de la población de España según el empadronamiento hecho en la Península e Islas Adyacentes el 31 de diciembre de 1920 (Madrid: Imprenta Hijos de M. G. Hernández Libertad, 1922)

Censo de la población de España según el empadronamiento hecho en la Península e Islas Adyacentes y posesiones del norte y costa occidental de África el 31 de diciembre de 1930 (Madrid: Talleres del Instituto Geográfico y Catastral, 1932)

B.2 Archival sources

Archivo General de la Administración (AGA)

Appendix C

Estimation of secondary education Gross Enrollment Rates (GER), 1860-1930

Table C.1. Year 1860. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	17263	31	265	67
Albacete	36525	66	194	49
Alicante	67961	124	298	75
Almería	56231	102	384	96
Ávila	30250	55	117	29
Badajoz	69994	127	259	65
Baleares	44953	82	249	62
Barcelona	122583	223	1426	358
Burgos	58759	107	401	101
Cáceres	53135	97	209	52
Cádiz	64292	117	366	92
Canarias	39757	72	129	32
Castellón	47627	87	212	53
Ciudad Real	45521	83	171	43
Córdoba	64489	117	553	139
Coruña	90363	164	423	106
Cuenca	39775	72	224	56
Gerona	51909	94	344	86
Granada	77755	141	627	157
Guadalajara	35049	64	240	60
Guipúzcoa	29961	55	274	69
Huelva	30696	56	97	24
Huesca	44147	80	210	53
Jaén	66952	122	417	105
León	61811	112	191	48
Lérida	52761	96	277	70
Logroño	29928	54	244	61
Lugo	72044	131	137	34
Madrid	76448	139	3256	817
Málaga	79640	145	529	133
Murcia	64293	117	247	62
Navarra	55025	100	288	72
Orense	59378	108	177	44
Oviedo	89744	163	239	60
Palencia	33255	61	303	76
Pontevedra	70445	128	156	39
Salamanca	46379	84	318	80
Santander	36007	66	442	111
Segovia	25581	47	150	38
Sevilla	80935	147	881	221
Soria	26678	49	176	44
Tarragona	55281	101	351	88
Teruel	40270	73	158	40
Toledo	56210	102	219	55
Valencia	109063	198	915	230
Valladolid	43435	79	664	167
Vizcaya	30218	55	307	77
Zamora	44787	81	208	52
Zaragoza	67248	122	601	151
SPAIN	**54955**	**100**	**398**	**100**

Table C.2. Year 1860. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	1,535	217	2,976	209
Albacete	0,531	75	1,068	75
Alicante	0,438	62	0,896	63
Almería	0,683	97	1,398	98
Ávila	0,387	55	0,774	54
Badajoz	0,370	52	0,732	51
Baleares	0,554	78	1,129	79
Barcelona	1,163	165	2,399	168
Burgos	0,682	97	1,384	97
Cáceres	0,393	56	0,779	55
Cádiz	0,569	81	1,095	77
Canarias	0,324	46	0,678	48
Castellón	0,445	63	0,896	63
Ciudad Real	0,376	53	0,745	52
Córdoba	0,858	121	1,726	121
Coruña	0,468	66	0,992	70
Cuenca	0,563	80	1,140	80
Gerona	0,663	94	1,352	95
Granada	0,806	114	1,614	113
Guadalajara	0,685	97	1,347	95
Guipúzcoa	0,915	130	1,819	128
Huelva	0,316	45	0,633	44
Huesca	0,476	67	0,946	66
Jaén	0,623	88	1,223	86
León	0,309	44	0,629	44
Lérida	0,525	74	1,052	74
Logroño	0,815	115	1,683	118
Lugo	0,190	27	0,387	27
Madrid	4,259	603	8,459	594
Málaga	0,664	94	1,336	94
Murcia	0,384	54	0,768	54
Navarra	0,523	74	1,040	73
Orense	0,298	42	0,604	42
Oviedo	0,266	38	0,566	40
Palencia	0,911	129	1,831	129
Pontevedra	0,221	31	0,471	33
Salamanca	0,686	97	1,366	96
Santander	1,228	174	2,689	189
Segovia	0,586	83	1,162	82
Sevilla	1,089	154	2,171	152
Soria	0,660	93	1,366	96
Tarragona	0,635	90	1,291	91
Teruel	0,392	56	0,818	57
Toledo	0,390	55	0,757	53
Valencia	0,839	119	1,703	120
Valladolid	1,529	217	3,069	216
Vizcaya	1,016	144	2,078	146
Zamora	0,464	66	0,943	66
Zaragoza	0,894	127	1,789	126
SPAIN	**0,706**	**100**	**1,424**	**100**

Table C.3. Year 1870. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	18074	30	294	52
Albacete	39439	66	433	77
Alicante	76695	128	470	84
Almería	64477	108	290	52
Ávila	31455	53	350	62
Badajoz	74885	125	327	58
Baleares	48249	81	546	97
Barcelona	144139	241	2038	363
Burgos	61526	103	475	85
Cáceres	52351	87	157	28
Cádiz	73704	123	851	152
Canarias	49562	83	326	58
Castellón	52183	87	329	59
Ciudad Real	47245	79	287	51
Córdoba	66430	111	859	153
Coruña	103265	173	666	119
Cuenca	42111	70	247	44
Gerona	52272	87	649	116
Granada	84696	141	600	107
Guadalajara	36030	60	156	28
Guipúzcoa	33144	55	181	32
Huelva	36128	60	108	19
Huesca	44946	75	162	29
Jaén	76028	127	339	60
León	61928	103	186	33
Lérida	52023	87	284	51
Logroño	31254	52	267	48
Lugo	71067	119	287	51
Madrid	94707	158	4149	739
Málaga	87991	147	454	81
Murcia	82049	137	822	146
Navarra	58657	98	665	118
Orense	63421	106	209	37
Oviedo	101627	170	797	142
Palencia	32856	55	226	40
Pontevedra	74248	124	294	52
Salamanca	49725	83	279	50
Santander	41473	69	521	93
Segovia	26490	44	250	45
Sevilla	86937	145	1487	265
Soria	27431	46	158	28
Tarragona	59128	99	619	110
Teruel	42746	71	112	20
Toledo	59334	99	440	78
Valencia	120888	202	1642	292
Valladolid	45350	76	740	132
Vizcaya	35809	60	527	94
Zamora	45277	76	242	43
Zaragoza	71867	120	724	129
SPAIN	**59864**	**100**	**562**	**100**

Table C.4. Year 1870. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	1,627	185	3,177	178
Albacete	1,098	125	2,240	125
Alicante	0,613	70	1,266	71
Almería	0,450	51	0,935	52
Ávila	1,113	127	2,246	126
Badajoz	0,437	50	0,871	49
Baleares	1,132	129	2,286	128
Barcelona	1,414	161	2,954	165
Burgos	0,772	88	1,576	88
Cáceres	0,300	34	0,599	34
Cádiz	1,155	132	2,257	126
Canarias	0,658	75	1,385	78
Castellón	0,630	72	1,276	71
Ciudad Real	0,607	69	1,217	68
Córdoba	1,293	147	2,629	147
Coruña	0,645	73	1,382	77
Cuenca	0,587	67	1,193	67
Gerona	1,242	141	2,539	142
Granada	0,708	81	1,446	81
Guadalajara	0,433	49	0,853	48
Guipúzcoa	0,546	62	1,075	60
Huelva	0,299	34	0,600	34
Huesca	0,360	41	0,724	41
Jaén	0,446	51	0,887	50
León	0,300	34	0,620	35
Lérida	0,546	62	1,111	62
Logroño	0,854	97	1,776	99
Lugo	0,404	46	0,834	47
Madrid	4,381	499	8,713	488
Málaga	0,516	59	1,069	60
Murcia	1,002	114	2,035	114
Navarra	1,134	129	2,217	124
Orense	0,330	38	0,684	38
Oviedo	0,784	89	1,703	95
Palencia	0,688	78	1,405	79
Pontevedra	0,396	45	0,864	48
Salamanca	0,561	64	1,133	63
Santander	1,256	143	2,812	157
Segovia	0,944	108	1,891	106
Sevilla	1,710	195	3,480	195
Soria	0,576	66	1,215	68
Tarragona	1,047	119	2,148	120
Teruel	0,262	30	0,546	31
Toledo	0,742	85	1,462	82
Valencia	1,358	155	2,781	156
Valladolid	1,632	186	3,334	187
Vizcaya	1,472	168	2,996	168
Zamora	0,534	61	1,095	61
Zaragoza	1,007	115	2,031	114
SPAIN	**0,878**	**100**	**1,787**	**100**

Table C.5. Year 1880. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	20490	29	162	25
Albacete	46016	65	340	53
Alicante	92516	132	684	106
Almería	78566	112	196	30
Ávila	35859	51	184	29
Badajoz	87429	124	515	80
Baleares	56201	80	545	85
Barcelona	175006	249	2383	371
Burgos	69721	99	395	61
Cáceres	57653	82	275	43
Cádiz	88652	126	1384	215
Canarias	64317	92	324	50
Castellón	61600	88	257	40
Ciudad Real	53712	76	253	39
Córdoba	75682	108	715	111
Coruña	126481	180	852	133
Cuenca	48383	69	227	35
Gerona	58499	83	576	90
Granada	99972	142	845	131
Guadalajara	40616	58	234	36
Guipúzcoa	39318	56	291	45
Huelva	44226	63	127	20
Huesca	50503	72	267	42
Jaén	91419	130	656	102
León	69083	98	406	63
Lérida	57298	82	266	41
Logroño	35490	50	299	47
Lugo	78389	112	303	47
Madrid	116291	165	4308	670
Málaga	104873	149	834	130
Murcia	105200	150	1153	179
Navarra	67238	96	361	56
Orense	73528	105	316	49
Oviedo	123348	176	778	121
Palencia	35805	51	314	49
Pontevedra	86763	123	329	51
Salamanca	57469	82	593	92
Santander	50635	72	715	111
Segovia	30095	43	186	29
Sevilla	101019	144	1675	261
Soria	31110	44	144	22
Tarragona	68392	97	545	85
Teruel	49484	70	177	28
Toledo	67823	97	431	67
Valencia	144207	205	1896	295
Valladolid	50922	72	1107	172
Vizcaya	43980	63	433	67
Zamora	50095	71	312	49
Zaragoza	82482	117	938	146
SPAIN	**70283**	**100**	**643**	**100**

Table C.6. Year 1880. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	0,791	95	1,552	92
Albacete	0,739	89	1,515	89
Alicante	0,739	89	1,529	90
Almería	0,249	30	0,519	31
Ávila	0,513	62	1,040	61
Badajoz	0,589	71	1,177	69
Baleares	0,970	117	1,940	114
Barcelona	1,362	164	2,849	168
Burgos	0,567	68	1,157	68
Cáceres	0,477	57	0,956	56
Cádiz	1,561	188	3,080	182
Canarias	0,504	61	1,056	62
Castellón	0,417	50	0,843	50
Ciudad Real	0,471	57	0,948	56
Córdoba	0,945	114	1,924	113
Coruña	0,674	81	1,440	85
Cuenca	0,469	57	0,957	56
Gerona	0,985	119	2,004	118
Granada	0,845	102	1,738	102
Guadalajara	0,576	69	1,142	67
Guipúzcoa	0,740	89	1,447	85
Huelva	0,287	35	0,575	34
Huesca	0,529	64	1,067	63
Jaén	0,718	86	1,434	85
León	0,588	71	1,220	72
Lérida	0,464	56	0,950	56
Logroño	0,842	102	1,746	103
Lugo	0,387	47	0,802	47
Madrid	3,704	447	7,387	436
Málaga	0,795	96	1,668	98
Murcia	1,096	132	2,233	132
Navarra	0,537	65	1,041	61
Orense	0,430	52	0,898	53
Oviedo	0,631	76	1,373	81
Palencia	0,877	106	1,805	106
Pontevedra	0,379	46	0,832	49
Salamanca	1,032	124	2,091	123
Santander	1,412	170	3,152	186
Segovia	0,618	74	1,244	73
Sevilla	1,658	200	3,400	200
Soria	0,463	56	0,983	58
Tarragona	0,797	96	1,636	96
Teruel	0,358	43	0,742	44
Toledo	0,635	77	1,264	75
Valencia	1,315	158	2,700	159
Valladolid	2,174	262	4,477	264
Vizcaya	0,985	119	1,989	117
Zamora	0,623	75	1,275	75
Zaragoza	1,137	137	2,298	136
SPAIN	**0,830**	**100**	**1,696**	**100**

Table C.7. Year 1890. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	17327	24	239	34
Albacete	47146	64	254	36
Alicante	95251	130	791	112
Almería	75382	103	525	74
Ávila	38470	53	142	20
Badajoz	95260	130	452	64
Baleares	66140	90	827	117
Barcelona	183019	250	2704	382
Burgos	62930	86	469	66
Cáceres	67325	92	372	53
Cádiz	91640	125	1732	245
Canarias	67330	92	405	57
Castellón	59279	81	215	30
Ciudad Real	59673	82	223	32
Córdoba	85974	117	682	96
Coruña	129147	176	1049	148
Cuenca	47858	65	186	26
Gerona	62002	85	686	97
Granada	104776	143	843	119
Guadalajara	39041	53	283	40
Guipúzcoa	38544	53	504	71
Huelva	54089	74	172	24
Huesca	51078	70	223	32
Jaén	92399	126	649	92
León	75283	103	383	54
Lérida	56020	77	473	67
Logroño	34076	47	326	46
Lugo	83161	114	378	53
Madrid	130489	178	4924	696
Málaga	114400	156	873	123
Murcia	110497	151	877	124
Navarra	60480	83	366	52
Orense	79886	109	376	53
Oviedo	125116	171	875	124
Palencia	33727	46	334	47
Pontevedra	89573	122	473	67
Salamanca	63241	86	533	75
Santander	49038	67	702	99
Segovia	30011	41	148	21
Sevilla	111028	152	1404	198
Soria	30044	41	125	18
Tarragona	70589	96	832	118
Teruel	46834	64	184	26
Toledo	70081	96	467	66
Valencia	160365	219	1782	252
Valladolid	49490	68	1030	146
Vizcaya	47346	65	713	101
Zamora	51515	70	455	64
Zaragoza	84006	115	1024	145
SPAIN	**73212**	**100**	**708**	**100**

Table C.8. Year 1890. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	1,379	154	2,635	145
Albacete	0,539	60	1,095	60
Alicante	0,830	93	1,711	94
Almería	0,696	78	1,431	79
Ávila	0,369	41	0,742	41
Badajoz	0,474	53	0,954	53
Baleares	1,250	140	2,517	139
Barcelona	1,477	165	3,093	170
Burgos	0,745	83	1,500	83
Cáceres	0,553	62	1,103	61
Cádiz	1,890	211	3,714	205
Canarias	0,602	67	1,353	74
Castellón	0,363	41	0,727	40
Ciudad Real	0,374	42	0,747	41
Córdoba	0,793	89	1,599	88
Coruña	0,812	91	1,730	95
Cuenca	0,389	43	0,792	44
Gerona	1,106	124	2,233	123
Granada	0,805	90	1,630	90
Guadalajara	0,725	81	1,408	78
Guipúzcoa	1,308	146	2,681	148
Huelva	0,318	36	0,625	34
Huesca	0,437	49	0,860	47
Jaén	0,702	79	1,414	78
León	0,509	57	1,047	58
Lérida	0,844	94	1,653	91
Logroño	0,957	107	1,960	108
Lugo	0,455	51	0,925	51
Madrid	3,773	422	7,498	413
Málaga	0,763	85	1,601	88
Murcia	0,794	89	1,610	89
Navarra	0,605	68	1,208	67
Orense	0,471	53	0,986	54
Oviedo	0,699	78	1,499	83
Palencia	0,990	111	2,001	110
Pontevedra	0,528	59	1,171	64
Salamanca	0,843	94	1,689	93
Santander	1,432	160	3,110	171
Segovia	0,493	55	0,997	55
Sevilla	1,265	141	2,555	141
Soria	0,416	47	0,866	48
Tarragona	1,179	132	2,393	132
Teruel	0,393	44	0,796	44
Toledo	0,666	75	1,334	73
Valencia	1,111	124	2,257	124
Valladolid	2,081	233	4,193	231
Vizcaya	1,506	168	3,092	170
Zamora	0,883	99	1,788	98
Zaragoza	1,219	136	2,440	134
SPAIN	**0,894**	**100**	**1,816**	**100**

Table C.9. Year 1900. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	20978	27	329	50
Albacete	48093	61	264	40
Alicante	94985	121	766	116
Almería	75761	97	453	69
Ávila	42218	54	145	22
Badajoz	109494	139	748	113
Baleares	63538	81	567	86
Barcelona	217515	277	2474	375
Burgos	69528	89	396	60
Cáceres	76256	97	265	40
Cádiz	91886	117	1340	203
Canarias	78981	101	386	59
Castellón	60253	77	259	39
Ciudad Real	67837	86	143	22
Córdoba	95133	121	478	73
Coruña	129211	165	1032	157
Cuenca	50099	64	209	32
Gerona	60780	77	663	101
Granada	103022	131	717	109
Guadalajara	39582	50	245	37
Guipúzcoa	43866	56	467	71
Huelva	56393	72	105	16
Huesca	51457	66	167	25
Jaén	97546	124	563	85
León	81501	104	399	61
Lérida	55649	71	324	49
Logroño	39089	50	377	57
Lugo	97769	125	304	46
Madrid	152123	194	4665	708
Málaga	110041	140	734	111
Murcia	124250	158	815	124
Navarra	69354	88	358	54
Orense	85895	109	214	32
Oviedo	130751	167	991	150
Palencia	40081	51	233	35
Pontevedra	88571	113	398	60
Salamanca	66944	85	536	81
Santander	58755	75	626	95
Segovia	32997	42	157	24
Sevilla	111940	143	1482	225
Soria	31107	40	151	23
Tarragona	69033	88	528	80
Teruel	46792	60	168	25
Toledo	80750	103	523	79
Valencia	161219	205	1871	284
Valladolid	58012	74	900	137
Vizcaya	66435	85	1087	165
Zamora	56477	72	360	55
Zaragoza	86187	110	916	139
SPAIN	**78493**	**100**	**659**	**100**

Table C.10. Year 1900. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	1,568	204	3,086	197
Albacete	0,549	71	1,118	71
Alicante	0,806	105	1,630	104
Almería	0,598	78	1,225	78
Ávila	0,343	45	0,693	44
Badajoz	0,683	89	1,379	88
Baleares	0,892	116	1,839	118
Barcelona	1,137	148	2,374	152
Burgos	0,570	74	1,157	74
Cáceres	0,348	45	0,693	44
Cádiz	1,458	190	2,995	192
Canarias	0,489	64	1,058	68
Castellón	0,430	56	0,858	55
Ciudad Real	0,211	27	0,427	27
Córdoba	0,502	65	1,008	64
Coruña	0,799	104	1,705	109
Cuenca	0,417	54	0,850	54
Gerona	1,091	142	2,214	142
Granada	0,696	91	1,410	90
Guadalajara	0,619	81	1,234	79
Guipúzcoa	1,065	139	2,142	137
Huelva	0,186	24	0,372	24
Huesca	0,325	42	0,638	41
Jaén	0,577	75	1,156	74
León	0,490	64	1,019	65
Lérida	0,582	76	1,125	72
Logroño	0,964	126	1,970	126
Lugo	0,311	40	0,644	41
Madrid	3,067	399	6,318	404
Málaga	0,667	87	1,379	88
Murcia	0,656	85	1,322	85
Navarra	0,516	67	1,025	66
Orense	0,249	32	0,538	34
Oviedo	0,758	99	1,617	103
Palencia	0,581	76	1,171	75
Pontevedra	0,449	59	1,008	64
Salamanca	0,801	104	1,618	103
Santander	1,065	139	2,242	143
Segovia	0,476	62	0,947	61
Sevilla	1,324	172	2,700	173
Soria	0,485	63	1,005	64
Tarragona	0,765	100	1,543	99
Teruel	0,359	47	0,718	46
Toledo	0,648	84	1,291	83
Valencia	1,161	151	2,353	150
Valladolid	1,551	202	3,154	202
Vizcaya	1,636	213	3,235	207
Zamora	0,637	83	1,304	83
Zaragoza	1,063	138	2,118	135
SPAIN	**0,768**	**100**	**1,564**	**100**

Table C.11. Year 1910. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	21018	24	414	57
Albacete	56796	66	418	58
Alicante	115372	134	681	94
Almería	88674	103	411	57
Ávila	42726	50	198	27
Badajoz	119134	139	879	122
Baleares	65795	77	548	76
Barcelona	226432	263	1888	261
Burgos	71343	83	287	40
Cáceres	79343	92	362	50
Cádiz	96075	112	1037	143
Canarias	103483	120	374	52
Castellón	66864	78	269	37
Ciudad Real	79801	93	397	55
Córdoba	102844	120	692	96
Coruña	146636	171	2337	323
Cuenca	55567	65	184	25
Gerona	64529	75	943	130
Granada	116698	136	982	136
Guadalajara	41977	49	253	35
Guipúzcoa	50609	59	366	51
Huelva	63630	74	210	29
Huesca	51265	60	198	27
Jaén	102261	119	725	100
León	84830	99	466	64
Lérida	58049	68	416	58
Logroño	39659	46	331	46
Lugo	110240	128	353	49
Madrid	176483	205	5290	731
Málaga	113772	132	640	88
Murcia	150038	175	829	115
Navarra	67962	79	416	58
Orense	84953	99	333	46
Oviedo	147215	171	990	137
Palencia	39827	46	308	43
Pontevedra	101713	118	424	59
Salamanca	69096	80	571	79
Santander	69578	81	395	55
Segovia	34140	40	176	24
Sevilla	122520	143	1466	203
Soria	30852	36	158	22
Tarragona	68768	80	673	93
Teruel	51634	60	289	40
Toledo	85988	100	421	58
Valencia	190862	222	1977	273
Valladolid	58332	68	1100	152
Vizcaya	78843	92	930	129
Zamora	55812	65	383	53
Zaragoza	92083	107	1053	146
SPAIN	**85962**	**100**	**723**	**100**

Table C.12. Year 1910. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	1,970	251	3,884	243
Albacete	0,736	94	1,473	92
Alicante	0,590	75	1,208	75
Almería	0,463	59	0,990	62
Ávila	0,463	59	0,934	58
Badajoz	0,738	94	1,484	93
Baleares	0,833	106	1,744	109
Barcelona	0,834	106	1,735	108
Burgos	0,402	51	0,819	51
Cáceres	0,456	58	0,925	58
Cádiz	1,079	138	2,203	138
Canarias	0,361	46	0,790	49
Castellón	0,402	51	0,799	50
Ciudad Real	0,497	63	0,999	62
Córdoba	0,673	86	1,341	84
Coruña	1,594	203	3,467	216
Cuenca	0,331	42	0,666	42
Gerona	1,461	186	2,939	184
Granada	0,841	107	1,699	106
Guadalajara	0,603	77	1,166	73
Guipúzcoa	0,723	92	1,447	90
Huelva	0,330	42	0,660	41
Huesca	0,386	49	0,744	46
Jaén	0,709	90	1,446	90
León	0,549	70	1,144	71
Lérida	0,717	91	1,401	87
Logroño	0,835	106	1,720	107
Lugo	0,320	41	0,656	41
Madrid	2,997	382	6,123	382
Málaga	0,563	72	1,161	73
Murcia	0,553	70	1,121	70
Navarra	0,612	78	1,211	76
Orense	0,392	50	0,848	53
Oviedo	0,672	86	1,472	92
Palencia	0,773	99	1,576	98
Pontevedra	0,417	53	0,915	57
Salamanca	0,826	105	1,685	105
Santander	0,568	72	1,223	76
Segovia	0,516	66	1,035	65
Sevilla	1,197	152	2,394	150
Soria	0,512	65	1,067	67
Tarragona	0,979	125	1,966	123
Teruel	0,560	71	1,088	68
Toledo	0,490	62	0,965	60
Valencia	1,036	132	2,074	129
Valladolid	1,886	240	3,870	242
Vizcaya	1,180	150	2,457	153
Zamora	0,686	87	1,439	90
Zaragoza	1,144	146	2,301	144
SPAIN	**0,785**	**100**	**1,602**	**100**

Table C.13. Year 1920. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	22165	23	824	74
Albacete	64745	66	401	36
Alicante	116046	118	751	68
Almería	88771	91	828	74
Ávila	46432	47	273	25
Badajoz	143605	147	1145	103
Baleares	71351	73	870	78
Barcelona	267105	273	3589	323
Burgos	75551	77	344	31
Cáceres	97894	100	487	44
Cádiz	113539	116	1237	111
Canarias	111494	114	480	43
Castellón	64460	66	564	51
Ciudad Real	96178	98	672	60
Córdoba	129572	132	978	88
Coruña	172721	176	1316	118
Cuenca	62861	64	348	31
Gerona	68134	70	855	77
Granada	137298	140	1651	148
Guadalajara	43770	45	361	32
Guipúzcoa	60743	62	581	52
Huelva	72474	74	335	30
Huesca	54875	56	223	20
Jaén	136364	139	917	82
León	97416	99	911	82
Lérida	66929	68	724	65
Logroño	44413	45	706	63
Lugo	119198	122	808	73
Madrid	220646	225	12683	1141
Málaga	130030	133	738	66
Murcia	155961	159	1005	90
Navarra	76039	78	336	30
Orense	99462	102	674	61
Oviedo	170947	175	1496	135
Palencia	41742	43	423	38
Pontevedra	127965	131	977	88
Salamanca	72033	74	1268	114
Santander	79027	81	595	54
Segovia	37735	39	491	44
Sevilla	154414	158	2205	198
Soria	33804	35	184	17
Tarragona	71126	73	718	65
Teruel	54641	56	503	45
Toledo	99322	101	244	22
Valencia	203639	208	2254	203
Valladolid	61947	63	1605	144
Vizcaya	95095	97	929	84
Zamora	57690	59	422	38
Zaragoza	109750	112	1553	140
SPAIN	**97941**	**100**	**1112**	**100**

Table C.14. Year 1920. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	3,718	353	7,291	342
Albacete	0,619	59	1,241	58
Alicante	0,647	62	1,337	63
Almería	0,933	89	1,980	93
Ávila	0,588	56	1,189	56
Badajoz	0,797	76	1,593	75
Baleares	1,219	116	2,522	118
Barcelona	1,344	128	2,751	129
Burgos	0,455	43	0,915	43
Cáceres	0,497	47	0,991	46
Cádiz	1,089	104	2,224	104
Canarias	0,431	41	0,929	44
Castellón	0,875	83	1,737	81
Ciudad Real	0,699	66	1,404	66
Córdoba	0,755	72	1,496	70
Coruña	0,762	72	1,618	76
Cuenca	0,554	53	1,101	52
Gerona	1,255	119	2,532	119
Granada	1,202	114	2,449	115
Guadalajara	0,825	78	1,620	76
Guipúzcoa	0,956	91	1,940	91
Huelva	0,462	44	0,930	44
Huesca	0,406	39	0,797	37
Jaén	0,672	64	1,333	62
León	0,935	89	1,905	89
Lérida	1,082	103	2,119	99
Logroño	1,590	151	3,195	150
Lugo	0,678	64	1,399	66
Madrid	5,748	546	11,733	550
Málaga	0,568	54	1,151	54
Murcia	0,644	61	1,352	63
Navarra	0,442	42	0,874	41
Orense	0,678	64	1,465	69
Oviedo	0,875	83	1,845	86
Palencia	1,013	96	2,041	96
Pontevedra	0,763	73	1,616	76
Salamanca	1,760	167	3,577	168
Santander	0,753	72	1,586	74
Segovia	1,301	124	2,579	121
Sevilla	1,428	136	2,896	136
Soria	0,544	52	1,127	53
Tarragona	1,009	96	2,023	95
Teruel	0,921	87	1,830	86
Toledo	0,246	23	0,484	23
Valencia	1,107	105	2,247	105
Valladolid	2,591	246	5,259	246
Vizcaya	0,977	93	1,992	93
Zamora	0,731	70	1,515	71
Zaragoza	1,415	134	2,817	132
SPAIN	**1,052**	**100**	**2,134**	**100**

Table C.15. Year 1930. Population between 10 and 20 years old and secondary education students, by province.

	Population 10 to 20 y. o.		Secondary education students	
	N	Spain=100	N	Spain=100
Álava	23196	25	1899	83
Albacete	64424	71	1298	56
Alicante	96430	106	2029	88
Almería	66072	73	1220	53
Ávila	41915	46	1138	50
Badajoz	132253	145	2198	96
Baleares	64740	71	1959	85
Barcelona	301509	331	7408	322
Burgos	67481	74	1014	44
Cáceres	82692	91	846	37
Cádiz	96840	106	3826	166
Canarias	122385	134	2504	109
Castellón	50701	56	739	32
Ciudad Real	96814	106	1120	49
Córdoba	135032	148	2530	110
Coruña	151087	166	3377	147
Cuenca	58610	64	582	25
Gerona	56757	62	1086	47
Granada	131176	144	2415	105
Guadalajara	38069	42	709	31
Guipúzcoa	59482	65	1393	61
Huelva	66832	73	711	31
Huesca	45276	50	500	22
Jaén	129599	142	1862	81
León	85446	94	1640	71
Lérida	58181	64	1193	52
Logroño	38935	43	1390	60
Lugo	94620	104	1235	54
Madrid	245489	269	20849	907
Málaga	117671	129	2661	116
Murcia	122979	135	3108	135
Navarra	69884	77	1673	73
Orense	89308	98	2013	88
Oviedo	164935	181	4007	174
Palencia	39475	43	567	25
Pontevedra	114953	126	1787	78
Salamanca	64984	71	2138	93
Santander	77274	85	1455	63
Segovia	32967	36	1223	53
Sevilla	152412	167	4080	178
Soria	29757	33	387	17
Tarragona	57428	63	2040	89
Teruel	44935	49	647	28
Toledo	96163	106	1127	49
Valencia	181418	199	4249	185
Valladolid	58180	64	2200	96
Vizcaya	94374	104	2349	102
Zamora	51351	56	1092	48
Zaragoza	101173	111	3156	137
SPAIN	**91095**	**100**	**2299**	**100**

Table C.16. Year 1930. Secondary education gross enrollment rates (GER), total and only males, by province.

	GER, total		GER, males only	
	%	Spain=100	%	Spain=100
Álava	8,187	343	15,816	332
Albacete	2,015	84	4,010	84
Alicante	2,104	88	4,281	90
Almería	1,846	77	3,802	80
Ávila	2,715	114	5,295	111
Badajoz	1,662	70	3,346	70
Baleares	3,026	127	6,032	127
Barcelona	2,457	103	5,030	106
Burgos	1,503	63	2,951	62
Cáceres	1,023	43	2,055	43
Cádiz	3,951	166	7,981	168
Canarias	2,046	86	4,115	86
Castellón	1,458	61	2,920	61
Ciudad Real	1,157	48	2,335	49
Córdoba	1,874	79	3,746	79
Coruña	2,235	94	4,516	95
Cuenca	0,993	42	1,945	41
Gerona	1,913	80	3,878	82
Granada	1,841	77	3,673	77
Guadalajara	1,862	78	3,529	74
Guipúzcoa	2,342	98	4,717	99
Huelva	1,064	45	2,145	45
Huesca	1,104	46	2,090	44
Jaén	1,437	60	2,863	60
León	1,919	80	3,866	81
Lérida	2,050	86	4,055	85
Logroño	3,570	150	7,050	148
Lugo	1,305	55	2,584	54
Madrid	8,493	356	17,015	358
Málaga	2,261	95	4,549	96
Murcia	2,527	106	5,091	107
Navarra	2,394	100	4,723	99
Orense	2,254	94	4,503	95
Oviedo	2,429	102	4,919	103
Palencia	1,436	60	2,867	60
Pontevedra	1,555	65	3,170	67
Salamanca	3,290	138	6,607	139
Santander	1,883	79	3,852	81
Segovia	3,710	156	7,181	151
Sevilla	2,677	112	5,440	114
Soria	1,301	55	2,569	54
Tarragona	3,552	149	7,090	149
Teruel	1,440	60	2,786	59
Toledo	1,172	49	2,288	48
Valencia	2,342	98	4,721	99
Valladolid	3,781	159	7,545	159
Vizcaya	2,489	104	5,046	106
Zamora	2,127	89	4,435	93
Zaragoza	3,119	131	6,153	129
SPAIN	**2,386**	**100**	**4,759**	**100**

Appendix D

Secondary education school census, 1860-1900

D.1 Public secondary schools (*institutos*)

Table D.1. Public high schools and their dates of creation

Year	Instituto
1835	Palma de Mallorca
1837	Guadalajara
1837	Murcia
1839	Cáceres
1839	Santander
1839	Tudela
1840	Bergara
1841	Albacete
1841	Burgos
1841	Soria
1841	Córdoba
1841	Gerona
1841	Lérida
1842	Jerez
1842	Sanlúcar de Barrameda
1842	Vitoria
1842	Oñate
1842	Logroño
1842	Lugo
1843	Ciudad Real
1844	Bilbao
1844	Cuenca
1844	León
1845	Alicante
1845	Almería
1845	Badajoz
1845	Baeza
1845	Barcelona

1845 Figueras
1845 Huesca
1845 Jaén
1845 Madrid-San Isidro
1845 Madrid-Noviciado
1845 Orense
1845 Orihuela
1845 Oviedo
1845 Palencia
1845 Pamplona
1845 Pontevedra
1845 Salamanca
1845 Santiago
1845 Segovia
1845 Sevilla
1845 Tarragona
1845 Teruel
1845 Toledo
1845 Zaragoza
1845 Valladolid
1845 Valencia
1846 Castellón
1846 Málaga
1846 Zamora
1846 La Laguna
1847 Cabra
1847 Osuna
1848 Ávila
1848 Monforte de Lemos
1849 Algeciras
1849 Granada
1856 Huelva

1862	La Coruña
1863	Cádiz
1863	Gijón
1863	Tortosa
1864	Lorca
1873	San Sebastián
1875	Reus
1875	Mahón
1913	Cartagena
1921	Melilla
1927	Manresa

Source: Viñao Frago (1982, pp. 397-406).

D.2 Private secondary schools (*colegios*)

D.2.1 Year 1857

Table D.2. Private schools in year 1857

School name	Municipality	Province	*Instituto*	University district
San Isidoro	Barcelona	Barcelona	Barcelona	Barcelona
D. Cándido Antiga	Barcelona	Barcelona	Barcelona	Barcelona
D. Gonzalo Cortada	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Barcelona	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Calella	Calella	Barcelona	Barcelona	Barcelona
Escuelas Pías de Igualada	Igualada	Barcelona	Barcelona	Barcelona
D. José Solá	Manresa	Barcelona	Barcelona	Barcelona
Valdemia	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Mataró	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Moià	Moià	Barcelona	Barcelona	Barcelona
Escuelas Pías de Sabadell	Sabadell	Barcelona	Barcelona	Barcelona
Colegio privado	Vic	Barcelona	Barcelona	Barcelona
San Felipe Neri	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco de Paula	Cádiz	Cádiz	Cádiz	Sevilla
San Nicolás de Tolentino	Cádiz	Cádiz	Cádiz	Sevilla
San Rafael	Cádiz	Cádiz	Cádiz	Sevilla
D. Manuel de la Pascua	San Fernando	Cádiz	Cádiz	Sevilla
Purísima Concepción	Cabra	Córdoba	Cabra	Sevilla
Escuelas Pías de Almodóvar del Pinar	Almodóvar del Pinar	Cuenca	Cuenca	Valencia
Escuelas Pías de Olot	Olot	Gerona	Gerona	Barcelona
Escuelas Pías de Puigcerdà	Puigcerdà	Gerona	Gerona	Barcelona
Escuelas Pías de Barbastro	Barbastro	Huesca	Huesca	Zaragoza
Escuelas Pías de Fraga	Fraga	Huesca	Huesca	Zaragoza
Escuelas Pías de Jaca	Jaca	Huesca	Huesca	Zaragoza
Escuelas Pías de Peralta de Calasanz	Peralta de Calasanz	Huesca	Huesca	Zaragoza
Escuelas Pías de Tamarite	Tamarite de Litera	Huesca	Huesca	Zaragoza
Escuelas Pías de Balaguer	Balaguer	Lérida	Lérida	Barcelona
Colegio privado de Logroño	Logroño	Logroño	Logroño	Zaragoza
Escuelas Pías de Getafe	Getafe	Madrid	Madrid-San Isidro	Madrid

de la Purísima Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
del Salvador	Madrid	Madrid	Madrid-Noviciado	Madrid
Niñas huérfanas de la Concepción	Madrid	Madrid	n.d.	Madrid
San Rafael	Madrid	Madrid	Madrid-San Isidro	Madrid
Santa Isabel	Madrid	Madrid	n.d.	Madrid
Academia	Madrid	Madrid	n.d.	Madrid
Academia de Palet	Madrid	Madrid	n.d.	Madrid
Gómez Paredes	Madrid	Madrid	n.d.	Madrid
Español	Madrid	Madrid	Madrid-San Isidro	Madrid
Loreto	Madrid	Madrid	n.d.	Madrid
Niñas de Leganés	Madrid	Madrid	n.d.	Madrid
Escuelas Pías de San Antonio Abad	Madrid	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Fernando	Madrid	Madrid	Madrid-San Isidro	Madrid
Escuelas Pías de Archidona	Archidona	Málaga	Málaga	Granada
Escuelas Pías de Villacarriedo	Villacarriedo	Santander	Santander	Valladolid
San Diego	Sevilla	Sevilla	Sevilla	Sevilla
San Fernando	Sevilla	Sevilla	Sevilla	Sevilla
San Hermenegildo	Sevilla	Sevilla	Sevilla	Sevilla
Escuelas Pías de Albarracín	Albarracín	Teruel	Teruel	Zaragoza
Escuelas Pías de Alcañiz	Alcañiz	Teruel	Teruel	Zaragoza
Escuelas Pías de Gandía	Gandía	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Daroca	Daroca	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Sos	Sos del Rey Católico	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Zaragoza	Zaragoza	Zaragoza	Zaragoza	Zaragoza

D.2.2 Year 1874

Table D.3. Private schools in year 1874

Nombre	**Municipio**	**Provincia**	***Instituto***	**Distrito universitario**
Colegio de Santo Domingo	Badajoz	Badajoz	Badajoz	Sevilla
Colegio de Cervantes	Badajoz	Badajoz	Badajoz	Sevilla
Colegio en Don Benito	Don Benito	Badajoz	Badajoz	Sevilla
Colegio en Jerez de los Caballeros	Jerez de los Caballeros	Badajoz	Badajoz	Sevilla
Colegio en Mérida	Mérida	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
Beato Oriol	Barcelona	Barcelona	Barcelona	Barcelona
San Agustín	Barcelona	Barcelona	Barcelona	Barcelona
San Antonio Abad	Barcelona	Barcelona	Barcelona	Barcelona
San Casiano	Barcelona	Barcelona	Barcelona	Barcelona
San Ildefonso	Barcelona	Barcelona	Barcelona	Barcelona
San Isidoro	Barcelona	Barcelona	Barcelona	Barcelona
San Isidro Labrador	Barcelona	Barcelona	Barcelona	Barcelona
San José (Sr. Ferrando)	Barcelona	Barcelona	Barcelona	Barcelona
San Luis	Barcelona	Barcelona	Barcelona	Barcelona
San Miguel	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás (D. José Martí)	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás (Sr. Miralles)	Barcelona	Barcelona	Barcelona	Barcelona
D. Antonio Martínez	Barcelona	Barcelona	Barcelona	Barcelona
D. Cándido Antiga	Barcelona	Barcelona	Barcelona	Barcelona
D. Claudio Mimó	Barcelona	Barcelona	Barcelona	Barcelona
D. Francisco Ferrer	Barcelona	Barcelona	Barcelona	Barcelona
D. Gonzalo Cortada	Barcelona	Barcelona	Barcelona	Barcelona
D. Guillermo L. Galavotti	Barcelona	Barcelona	Barcelona	Barcelona
D. Joaquín Polfort	Barcelona	Barcelona	Barcelona	Barcelona
D. José Aldavert	Barcelona	Barcelona	Barcelona	Barcelona
D. José M. Monteverde	Barcelona	Barcelona	Barcelona	Barcelona
D. José Martínez	Barcelona	Barcelona	Barcelona	Barcelona

D. Luis Cardona	Barcelona	Barcelona	Barcelona	Barcelona
D. Modesto Álvarez	Barcelona	Barcelona	Barcelona	Barcelona
D. Ramón Arquez	Barcelona	Barcelona	Barcelona	Barcelona
D. Ramón Miró	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico (Sr. Nuri)	Barcelona	Barcelona	Barcelona	Barcelona
Peninsular	Barcelona	Barcelona	Barcelona	Barcelona
Principado	Barcelona	Barcelona	Barcelona	Barcelona
Queraltó	Barcelona	Barcelona	Barcelona	Barcelona
R. Gatell	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Clariana	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Barcelona	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Calella	Calella	Barcelona	Barcelona	Barcelona
Granollers	Granollers	Barcelona	Barcelona	Barcelona
Escuelas Pías de Igualada	Igualada	Barcelona	Barcelona	Barcelona
D. José Solá	Manresa	Barcelona	Barcelona	Barcelona
Monserrat	Mataró	Barcelona	Barcelona	Barcelona
Valdemia	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Mataró	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Moià	Moià	Barcelona	Barcelona	Barcelona
San José	Sabadell	Barcelona	Barcelona	Barcelona
Escuelas Pías de Sabadell	Sabadell	Barcelona	Barcelona	Barcelona
D. Andrés Badosa	Sant Andreu de la Barca	Barcelona	Barcelona	Barcelona
San Juan Cadevall	Terrassa	Barcelona	Barcelona	Barcelona
Colegio privado	Vic	Barcelona	Barcelona	Barcelona
D. Antonio Trullás	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
D. Pablo Tort	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
Vera-cruz	Aranda de Duero	Burgos	Burgos	Valladolid
D. Enrique España	Briviesca	Burgos	Burgos	Valladolid
San Gil	Burgos	Burgos	Burgos	Valladolid
San José	Burgos	Burgos	Burgos	Valladolid
D. Gregorio del Castillo	Burgos	Burgos	Burgos	Valladolid

Nuestra Señora de la Palma	Algeciras	Cádiz	Cádiz	Sevilla
Nuestra Señora de las Nieves	Arcos de la Frontera	Cádiz	Cádiz	Sevilla
San Alberto	Cádiz	Cádiz	Cádiz	Sevilla
San Bernardo	Cádiz	Cádiz	Cádiz	Sevilla
San Buenaventura	Cádiz	Cádiz	Cádiz	Sevilla
San Clemente	Cádiz	Cádiz	Cádiz	Sevilla
San Felipe Neri	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco de Paula	Cádiz	Cádiz	Cádiz	Sevilla
San Nicolás de Tolentino	Cádiz	Cádiz	Cádiz	Sevilla
San Rafael	Cádiz	Cádiz	Cádiz	Sevilla
San Luis Gonzaga	Chiclana de la Frontera	Cádiz	Cádiz	Sevilla
San Rafael	Chiclana de la Frontera	Cádiz	Cádiz	Sevilla
D. Tirso Sánchez Cisneros	El Puerto de Santa María	Cádiz	Cádiz	Sevilla
Portuense	El Puerto de Santa María	Cádiz	Cádiz	Sevilla
Nuestra Señora del Carmen	San Fernando	Cádiz	Cádiz	Sevilla
D. Manuel de la Pascua	San Fernando	Cádiz	Cádiz	Sevilla
Escuelas Pías de Sanlúcar de Barrameda	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
San Isidoro	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
El Certamen	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
Nuestra Señora de la Consolación	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Balbuena	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Nuestra Señora de la Sierra	Cabra	Córdoba	Cabra	Sevilla
Purísima Concepción	Cabra	Córdoba	Cabra	Sevilla
Colegio de San Fernando	Córdoba	Córdoba	Córdoba	Sevilla
Colegio de San Rafael	Córdoba	Córdoba	Córdoba	Sevilla
Colegio de Santa Clara	Córdoba	Córdoba	Córdoba	Sevilla
Colegio de Betanzos	Betanzos	Coruña	Santiago	Santiago
Colegio de Anceis	Cambre	Coruña	Santiago	Santiago
Colegio de El Ferrol	Ferrol	Coruña	Santiago	Santiago
Colegio de Padrón	Padrón	Coruña	Santiago	Santiago
Escuelas Pías de Almodóvar del Pinar	Almodóvar del Pinar	Cuenca	Cuenca	Valencia

Colegio de La Bisbal	La Bisbal d'Empordà	Gerona	Gerona	Barcelona
Colegio de Blanes	Blanes	Gerona	Gerona	Barcelona
San Narciso	Gerona	Gerona	Gerona	Barcelona
D. Juan Carreras	Gerona	Gerona	Gerona	Barcelona
Colegio de Lloret de Mar	Lloret de Mar	Gerona	Gerona	Barcelona
Escuelas Pías de Olot	Olot	Gerona	Gerona	Barcelona
Escuelas Pías de Puigcerdà	Puigcerdà	Gerona	Gerona	Barcelona
Colegio de Sant Feliu de Guíxols	Sant Feliu de Guíxols	Gerona	Gerona	Barcelona
Instituto Libre de Molina de Aragón	Molina de Aragón	Guadalajara	Guadalajara	Madrid
Escuelas Pías de Molina de Aragón	Molina de Aragón	Guadalajara	Guadalajara	Madrid
Escuelas Pías de Barbastro	Barbastro	Huesca	Huesca	Zaragoza
Escuelas Pías de Fraga	Fraga	Huesca	Huesca	Zaragoza
Escuelas Pías de Jaca	Jaca	Huesca	Huesca	Zaragoza
Escuelas Pías de Peralta de Calasanz	Peralta de Calasanz	Huesca	Huesca	Zaragoza
Escuelas Pías de Tamarite	Tamarite de Litera	Huesca	Huesca	Zaragoza
Colegio privado de Baeza	Baeza	Jaén	Jaén	Granada
Colegio privado de la Carolina	La Carolina	Jaén	Jaén	Granada
Escuelas Pías de Úbeda	Úbeda	Jaén	Jaén	Granada
Colegio privado de Villarrillo (Villacarrillo?)	Villacarrillo	Jaén	Jaén	Granada
Colegio privado de Villanueva del Arzobispo	Villanueva del Arzobispo	Jaén	Jaén	Granada
Establecimiento privado	Astorga	León	León	Oviedo
Escuelas Pías de Balaguer	Balaguer	Lérida	Lérida	Barcelona
Colegio privado de Alfaro	Alfaro	Logroño	Logroño	Zaragoza
Colegio privado de Haro	Haro	Logroño	Logroño	Zaragoza
Colegio privado de Logroño	Logroño	Logroño	Logroño	Zaragoza
Colegio privado de Rasillo de Cameros	Rasillo de Cameros	Logroño	Logroño	Zaragoza
Escuelas Pías de Monforte	Monforte de Lemos	Lugo	Lugo	Santiago
Escuelas Pías de San Ildefonso	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de Getafe	Getafe		Madrid-San Isidro	Madrid
Asociación de Católicos	Madrid	Madrid	n.d.	Madrid
de la Inmaculada Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid

de la Purísima Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
De Loreto	Madrid	Madrid	n.d.	Madrid
de San Ignacio	Madrid	Madrid	Madrid-Noviciado	Madrid
de San Luis	Madrid	Madrid	n.d.	Madrid
del Salvador	Madrid	Madrid	Madrid-Noviciado	Madrid
Evangélico	Madrid	Madrid	n.d.	Madrid
Niñas huérfanas de la Concepción	Madrid	Madrid	n.d.	Madrid
San Luis Gonzaga	Madrid	Madrid	Madrid-San Isidro	Madrid
San Rafael	Madrid	Madrid	Madrid-San Isidro	Madrid
Santa Isabel	Madrid	Madrid	n.d.	Madrid
Academia	Madrid	Madrid	n.d.	Madrid
Academia	Madrid	Madrid	n.d.	Madrid
Academia de Palet	Madrid	Madrid	n.d.	Madrid
Colegio-Asamblea del distrito del Hospital	Madrid	Madrid	n.d.	Madrid
de Carabanchel	Madrid	Madrid	n.d.	Madrid
de D. Fermín Martínez	Madrid	Madrid	n.d.	Madrid
de Gómez Paredes	Madrid	Madrid	n.d.	Madrid
de la Providencia	Madrid	Madrid	n.d.	Madrid
de Lara	Madrid	Madrid	n.d.	Madrid
del Ángel	Madrid	Madrid	n.d.	Madrid
Escuela Politécnica	Madrid	Madrid	Madrid-San Isidro	Madrid
Español	Madrid	Madrid	Madrid-San Isidro	Madrid
Hispano Romano	Madrid	Madrid	Madrid-Noviciado	Madrid
Ibérico	Madrid	Madrid	Madrid-San Isidro	Madrid
Liceo Americano de Santa Isabel	Madrid	Madrid	n.d.	Madrid
Loreto	Madrid	Madrid	n.d.	Madrid
Madrileño	Madrid	Madrid	n.d.	Madrid
Niñas de Leganés	Madrid	Madrid	n.d.	Madrid
Pogonoski	Madrid	Madrid	n.d.	Madrid
Pontes	Madrid	Madrid	n.d.	Madrid
Escuelas Pías de San Antonio Abad	Madrid	Madrid	Madrid-Noviciado	Madrid

Escuelas Pías de San Fernando	Madrid	Madrid	Madrid-San Isidro	Madrid
Escuelas Pías de Archidona	Archidona	Málaga	Málaga	Granada
Escuelas Pías de Celanova	Celanova	Orense	Orense	Santiago
Sagrado Corazón de Jesús (jesuitas)	Carrión de los Condes	Palencia	Palencia	Valladolid
Colegio de Béjar	Béjar	Salamanca	Salamanca	Salamanca
Colegio privado de Ciudad Rodrigo	Ciudad Rodrigo	Salamanca	Salamanca	Salamanca
Colegio privado de Salamanca	Salamanca	Salamanca	Salamanca	Salamanca
San Sebastián de Reinosa	Reinosa	Santander	Santander	Valladolid
San Juan Bautista de Santoña	Santoña	Santander	Santander	Valladolid
Escuelas Pías de Villacarriedo	Villacarriedo	Santander	Santander	Valladolid
Colegio privado de Osuna	Osuna	Sevilla	Osuna	Sevilla
Espíritu Santo	Sevilla	Sevilla	Sevilla	Sevilla
Inmaculado Corazón de María	Sevilla	Sevilla	Sevilla	Sevilla
Jesús, María y José	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora del Carmen	Sevilla	Sevilla	Sevilla	Sevilla
San Diego	Sevilla	Sevilla	Sevilla	Sevilla
San Fernando	Sevilla	Sevilla	Sevilla	Sevilla
San Hermenegildo	Sevilla	Sevilla	Sevilla	Sevilla
San Isidro	Sevilla	Sevilla	Sevilla	Sevilla
San Leandro	Sevilla	Sevilla	Sevilla	Sevilla
San Lorenzo	Sevilla	Sevilla	Sevilla	Sevilla
San Luis Gonzaga	Sevilla	Sevilla	Sevilla	Sevilla
San Pedro	Sevilla	Sevilla	Sevilla	Sevilla
San Román	Sevilla	Sevilla	Sevilla	Sevilla
Santa Bárbara	Sevilla	Sevilla	Sevilla	Sevilla
Santo Ángel de la Guarda	Sevilla	Sevilla	Sevilla	Sevilla
Colegio de San Luis	Montblanc	Tarragona	Tarragona	Barcelona
Colegio de Montblanc	Montblanc	Tarragona	Tarragona	Barcelona
Colegio Reusense	Reus	Tarragona	Tarragona	Barcelona
Colegio de D. Ignacio Gual	Tarragona	Tarragona	Tarragona	Barcelona
Colegio de Falset	Tarragona	Tarragona	Tarragona	Barcelona

Colegio de Tarragona	Tarragona	Tarragona	Tarragona	Barcelona
Colegio Tarraconense	Tarragona	Tarragona	Tarragona	Barcelona
Colegio de Santo Tomás	Valls	Tarragona	Tarragona	Barcelona
Escuelas Pías de Albarracín	Albarracín	Teruel	Teruel	Zaragoza
Escuelas Pías de Alcañiz	Alcañiz	Teruel	Teruel	Zaragoza
Colegio de San José	Ocaña	Toledo	Toledo	Madrid
Nuestra Señora de la Piedad	Quintanar de la Orden	Toledo	Toledo	Madrid
Colegio de Nuestra Señora del Prado	Talavera de la Reina	Toledo	Toledo	Madrid
San Luis Gonzaga	Carcaixent	Valencia	Valencia	Valencia
Escuelas Pías de Gandía	Gandia	Valencia	Valencia	Valencia
Colegio de Sueca	Sueca	Valencia	Valencia	Valencia
Escuelas Pías de Utiel	Utiel	Valencia	Valencia	Valencia
Angélico del Cid	Valencia	Valencia	Valencia	Valencia
Colegio de la Concepción	Valencia	Valencia	Valencia	Valencia
San José (jesuitas)	Valencia	Valencia	Valencia	Valencia
Valentino	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Colegio de San Buenaventura	Medina de Rioseco	Valladolid	Valladolid	Valladolid
Colegio de la Providencia	Valladolid	Valladolid	Valladolid	Valladolid
Colegio de San Luis	Valladolid	Valladolid	Valladolid	Valladolid
Colegio de San Pedro	Valladolid	Valladolid	Valladolid	Valladolid
Escuelas Pías de Toro	Toro	Zamora	Zamora	Salamanca
Escuelas Pías de Daroca	Daroca	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Sos	Sos del Rey Católico	Zaragoza	Zaragoza	Zaragoza
Colegio de San Felipe	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San José	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Juan	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Miguel	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Ángel de las Escuelas	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Salvador	Zaragoza	Zaragoza	Zaragoza	Zaragoza

Colegio Politécnico	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Señores Altiñana	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Zaragoza	Zaragoza	Zaragoza	Zaragoza	Zaragoza
D. Antonio Ruiz Murcia	Ceuta	Ceuta	Cádiz	Sevilla

D.2.3 Year 1880

Table D.4. Private schools in year 1880

Nombre	Municipio	Provincia	Instituto	Distrito universitario
Primitivo	Hellín	Albacete	Albacete	Valencia
San José	Hellín	Albacete	Albacete	Valencia
del Salvador	Hellín	Albacete	Albacete	Valencia
La Caridad	Villarrobledo	Albacete	Albacete	Valencia
San José	Alicante	Alicante	Alicante	Valencia
de la Palma	Elche	Alicante	Alicante	Valencia
San Jorge	Alcoy	Alicante	Alicante	Valencia
Santo Domingo	Orihuela	Alicante	Alicante	Valencia
San Luis Gonzaga	Aspe	Alicante	Alicante	Valencia
Segunda enseñanza	Callosa de Ensarrià	Alicante	Alicante	Valencia
Santa Marta	Villajoyosa	Alicante	Alicante	Valencia
San Miguel	Orihuela	Alicante	Alicante	Valencia
Segunda enseñanza	Monóvar	Alicante	Alicante	Valencia
de la Inmaculada Concepción	Torrevieja	Alicante	Alicante	Valencia
San Juan Bautista	Purchena	Almería	Almería	Granada
Húercal-Overa	Húercal-Overa	Almería	Almería	Granada
Colegio	Arévalo	Ávila	Ávila	Salamanca
Hispano Lusitano	Don Benito	Badajoz	Badajoz	Sevilla
El Beturiense	Llerena	Badajoz	Badajoz	Sevilla
El Emeritense	Mérida	Badajoz	Badajoz	Sevilla
La Concepción	Villanueva de la Serena	Badajoz	Badajoz	Sevilla
San Agustín	Llerena	Badajoz	Badajoz	Sevilla
La Piedad	Villanueva de la Serena	Badajoz	Badajoz	Sevilla
Nuestra Señora de la Granada	Llerena	Badajoz	Badajoz	Sevilla
El Católico de Mérida	Mérida	Badajoz	Badajoz	Sevilla
Politécnico	Palma	Baleares	Palma	Barcelona
Palmesano	Palma	Baleares	Palma	Barcelona
Santa Teresa	Marratxí	Baleares	Palma	Barcelona
San Luis Gonzaga	Santa María	Baleares	Palma	Barcelona

Manacor	Manacor	Baleares	Palma	Barcelona
Ibiza	Ibiza	Baleares	Palma	Barcelona
D. Cándido Artiga	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Barcelona	Barcelona	Barcelona	Barcelona	Barcelona
San Isidoro	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás	Barcelona	Barcelona	Barcelona	Barcelona
Galavotti	Barcelona	Barcelona	Barcelona	Barcelona
San Luis	Barcelona	Barcelona	Barcelona	Barcelona
Martinez Subirá	Barcelona	Barcelona	Barcelona	Barcelona
San Isidro Labrador	Barcelona	Barcelona	Barcelona	Barcelona
D. Claudio Minió	Barcelona	Barcelona	Barcelona	Barcelona
Peninsular	Barcelona	Barcelona	Barcelona	Barcelona
San Agustín	Barcelona	Barcelona	Barcelona	Barcelona
San Miguel	Barcelona	Barcelona	Barcelona	Barcelona
Señores Miró	Barcelona	Barcelona	Barcelona	Barcelona
Pelfort	Barcelona	Barcelona	Barcelona	Barcelona
San Casiano	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Ferrer	Barcelona	Barcelona	Barcelona	Barcelona
San Ildefonso	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Clariana	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Álvarez	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Martinez Aguiló	Barcelona	Barcelona	Barcelona	Barcelona
Colón	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Martinez Monteverde	Barcelona	Barcelona	Barcelona	Barcelona
Seminario Conciliar	Barcelona	Barcelona	Barcelona	Barcelona
Mercantil	Barcelona	Barcelona	Barcelona	Barcelona
San José de Calasanz	Barcelona	Barcelona	Barcelona	Barcelona
Sr. Vilar	Barcelona	Barcelona	Barcelona	Barcelona
San Luis Gonzaga	Barcelona	Barcelona	Barcelona	Barcelona

Sr. Vallet	Barcelona	Barcelona	Barcelona	Barcelona
Beato Raymundo Lulio	Barcelona	Barcelona	Barcelona	Barcelona
Industrial	Barcelona	Barcelona	Barcelona	Barcelona
Cataluña	Barcelona	Barcelona	Barcelona	Barcelona
San Roque	Barcelona	Barcelona	Barcelona	Barcelona
Carreras	San Gervasio	Barcelona	Barcelona	Barcelona
Escuelas Pías Mataró	Mataró	Barcelona	Barcelona	Barcelona
Vich	Vich	Barcelona	Barcelona	Barcelona
Escuelas Pías Sabadell	Sabadell	Barcelona	Barcelona	Barcelona
San Ignacio	Manresa	Barcelona	Barcelona	Barcelona
Valldemia	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías Igualada	Igualada	Barcelona	Barcelona	Barcelona
Escuelas Pías de Calella	Calella	Barcelona	Barcelona	Barcelona
Panadés	Villafranca del Panadés	Barcelona	Barcelona	Barcelona
Sr. Tort	Villafranca del Panadés	Barcelona	Barcelona	Barcelona
Tarrasense	Terrassa	Barcelona	Barcelona	Barcelona
Academia de Idiomas	Gracia	Barcelona	Barcelona	Barcelona
San Juan	Gracia	Barcelona	Barcelona	Barcelona
San José	Sabadell	Barcelona	Barcelona	Barcelona
San Francisco	Granollers	Barcelona	Barcelona	Barcelona
San Andrés	San Andrés de Palomar	Barcelona	Barcelona	Barcelona
Principado	San Martí de Provençals	Barcelona	Barcelona	Barcelona
Sr. Solá	Badalona	Barcelona	Barcelona	Barcelona
San Antonio	Sans	Barcelona	Barcelona	Barcelona
Jesús	Gracia	Barcelona	Barcelona	Barcelona
Jesús María José	San Andrés de Palomar	Barcelona	Barcelona	Barcelona
Escuelas Pías de Villanueva	Villanueva y Geltrú	Barcelona	Barcelona	Barcelona
Gil Parerías	Gracia	Barcelona	Barcelona	Barcelona
Balmes	Gracia	Barcelona	Barcelona	Barcelona
Masnou	Masnou	Barcelona	Barcelona	Barcelona
Vera Cruz	Aranda de Duero	Burgos	Burgos	Valladolid

San Nicolás	Briviesca	Burgos	Burgos	Valladolid
San Luis Gonzaga	Burgos	Burgos	Burgos	Valladolid
Inmaculada Concepción	Miranda de Ebro	Burgos	Burgos	Valladolid
Purísima Concepción	Aranda de Duero	Burgos	Burgos	Valladolid
San José	Villarcayo	Burgos	Burgos	Valladolid
San José de Calasanz	Medina de Pomar	Burgos	Burgos	Valladolid
San Agustín	Lucena	Córdoba	Cabra	Sevilla
Nuestra Señora de la Concepción	Aguilar	Córdoba	Cabra	Sevilla
Liceo de San José	Baena	Córdoba	Cabra	Sevilla
Colegio	Plasencia	Cáceres	Cáceres	Salamanca
San Felipe Neri	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco de Paula	Cádiz	Cádiz	Cádiz	Sevilla
San Clemente	Cádiz	Cádiz	Cádiz	Sevilla
San Telmo	San Fernando	Cádiz	Cádiz	Sevilla
San Cayetano	San Fernando	Cádiz	Jerez	Sevilla
Purísima Concepción	Jerez	Cádiz	Jerez	Sevilla
Nuestra Señora de las Nieves	Arcos de la Frontera	Cádiz	Jerez	Sevilla
San Luiz Gonzaga	Puerto de Santa María	Cádiz	Jerez	Sevilla
San Francisco Javier	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Preparatorio para las carreras de la ??	San Fernando	Cádiz	Jerez	Sevilla
San Pedro	Chiclana	Cádiz	Jerez	Sevilla
Nuestra Señora de la Palma	Algeciras	Cádiz	Jerez	Sevilla
Nuestra Señora del Carmen	Medina Sidonia	Cádiz	Jerez	Sevilla
San Francisco Javier	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Santa Ana	Ceuta	Cádiz	Jerez	Sevilla
San José	Jerez	Cádiz	Jerez	Sevilla
San José	Alcalá de los Gazules	Cádiz	Jerez	Sevilla
Colegio de Santa Cruz de Tenerife	Santa Cruz de Tenerife	Canarias	Canarias	Sevilla
San Agustín	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
Purísima Concepción	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
Santa Cruz	Santa Cruz de la Palma	Canarias	Canarias	Sevilla

Forés	Vinaroz	Castellón	Castellón	Valencia
San Isidoro	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
Colegio de 2ª enseñanza	Almodóvar del Campo	Ciudad Real	Ciudad Real	Madrid
Santo Tomás de Villanueva	Infantes	Ciudad Real	Ciudad Real	Madrid
de la Unión	Infantes	Ciudad Real	Ciudad Real	Madrid
San Pelagio Mártir	Córdoba	Córdoba	Córdoba	Sevilla
Santa Clara	Córdoba	Córdoba	Córdoba	Sevilla
San Fernando	Córdoba	Córdoba	Córdoba	Sevilla
Fernandez de Molina	Córdoba	Córdoba	Córdoba	Sevilla
Colegio Católico	Coruña	Coruña	Coruña	Santiago
Colegio Católico	Ferrol	Coruña	Coruña	Santiago
D. Félix Masquelet	Ferrol	Coruña	Coruña	Santiago
Francisco J. Echave Carcaño	Coruña	Coruña	Coruña	Santiago
San Julián	Cuenca	Cuenca	Cuenca	Madrid
Nuestra Señora de la Concepción	Huete	Cuenca	Cuenca	Madrid
San Narciso	Gerona	Gerona	Gerona	Barcelona
Seminario	Gerona	Gerona	Gerona	Barcelona
Collell	Collell	Gerona	Gerona	Barcelona
Olot	Olot	Gerona	Gerona	Barcelona
Puigcerdá	Puigcerdá	Gerona	Gerona	Barcelona
San Feliu de Guixols	San Feliu de Guixols	Gerona	Gerona	Barcelona
La Bisbal	La Bisbal	Gerona	Gerona	Barcelona
Blanes	Blanes	Gerona	Gerona	Barcelona
Ripoll	Ripoll	Gerona	Gerona	Barcelona
D. Dionisio Aropagita	Sacromonte, extramuros de Granada	Granada	Granada	Granada
Dulce nombre de María	Granada	Granada	Granada	Granada
S. Bartolomé y Santiago	Granada	Granada	Granada	Granada
San Pablo	Granada	Granada	Granada	Granada
Jesús Nazareno	Granada	Granada	Granada	Granada
San Agustín	Granada	Granada	Granada	Granada
Santo Tomás	Granada	Granada	Granada	Granada

San Nicolás de Bari	Granada	Granada	Granada	Granada
San Torcuato	Guadix	Granada	Granada	Granada
Purísima Concepción	Baza	Granada	Granada	Granada
Escuelas Pías	Molina	Guadalajara	Guadalajara	Madrid
Huérfanos de la Guerra	Guadalajara	Guadalajara	Guadalajara	Madrid
Colegio Seminario de la Purísima Concepción	Sigüenza	Guadalajara	Guadalajara	Madrid
Nuestra Señora de Montemayor	Moguer	Huelva	Huelva	Sevilla
Colegio Colombino	Huelva	Huelva	Huelva	Sevilla
San Agustín	Huelva	Huelva	Huelva	Sevilla
Colegio de 2ª enseñanza	Huesca	Huesca	Huesca	Zaragoza
Escuelas Pías	Barbastro	Huesca	Huesca	Zaragoza
Escuelas Pías	Jaca	Huesca	Huesca	Zaragoza
Escuelas Pías	Tamarite	Huesca	Huesca	Zaragoza
Santísima Trinidad	Úbeda	Jaén	Jaén	Granada
Santa Capillar	Jaén	Jaén	Jaén	Granada
Linares	Linares	Jaén	Jaén	Granada
Seminario	Baeza	Jaén	Jaén	Granada
Villanueva del Arzobispo	Villanueva del Arzobispo	Jaén	Jaén	Granada
Quesada	Quesada	Jaén	Jaén	Granada
Cazorla	Cazorla	Jaén	Jaén	Granada
El Yliturgense	Andújar	Jaén	Jaén	Granada
Nuestra Señora de las Mercedes	Alcalá la Real	Jaén	Jaén	Granada
Jesús Nazareno	Porcuna	Jaén	Jaén	Granada
Castellar	Castellar	Jaén	Jaén	Granada
Villacarrillo	Villacarrillo	Jaén	Jaén	Granada
San Mateo	Valderas	León	León	Oviedo
La Bañeza	La Bañeza	León	León	Oviedo
de Cervera	Cervera	Lérida	Lérida	Barcelona
Escuelas Pías	Balaguer	Lérida	Lérida	Barcelona
de la Paz	Seo de Urgel	Lérida	Lérida	Barcelona
San José	Tremp	Lérida	Lérida	Barcelona

del Rasillo	Rasillo	Logroño	Logroño	Zaragoza
Santo Domingo de la Calzada	Santo Domingo de la Calzada	Logroño	Logroño	Zaragoza
de la Concepción	Haro	Logroño	Logroño	Zaragoza
Guistilianense	Calahorra	Logroño	Logroño	Zaragoza
Escuelas Pías de Monforte	Monforte de Lemos	Lugo	Lugo	Santiago
San Luis Gonzaga	Antequera	Málaga	Málaga	Granada
San Rafael	Málaga	Málaga	Málaga	Granada
San Isidoro	Málaga	Málaga	Málaga	Granada
D. Jorge	Málaga	Málaga	Málaga	Granada
Academia Mercantil	Málaga	Málaga	Málaga	Granada
Santo Tomás de Aquino	Málaga	Málaga	Málaga	Granada
San Sebastián	Málaga	Málaga	Málaga	Granada
San Agustín	Málaga	Málaga	Málaga	Granada
Liceo Cervantes	Estepona	Málaga	Málaga	Granada
San Cayetano	Ronda	Málaga	Málaga	Granada
Escuelas Pías	Archidona	Málaga	Málaga	Granada
San Rafael	Vélez-Málaga	Málaga	Málaga	Granada
Politécnico	Cartagena	Murcia	Murcia	Valencia
Purísima Concepción	Cartagena	Murcia	Murcia	Valencia
Cuatro Santos	Cartagena	Murcia	Murcia	Valencia
Santísima Trinidad	Cartagena	Murcia	Murcia	Valencia
Santísima Cruz	Caravaca	Murcia	Murcia	Valencia
San Luis Gonzaga	Cieza	Murcia	Murcia	Valencia
Escuelas Pías	Yecla	Murcia	Murcia	Valencia
Escuelas Pías de Celanova	Celanova	Orense	Orense	Santiago
Encarnación	Llanes	Oviedo	Oviedo	Oviedo
Inmaculada Concepción	Monasterio de Val-de-Dios (Villaviciosa)	Oviedo	Oviedo	Oviedo
Villaviciosa	Villaviciosa	Oviedo	Oviedo	Oviedo
Cangas de Tineo	Cangas de Tineo	Oviedo	Oviedo	Oviedo
Luarca	Luarca	Oviedo	Oviedo	Oviedo
Nuestra Señora de Covadonga	Cangas de Onís	Oviedo	Oviedo	Oviedo

Merced	Avilés	Oviedo	Oviedo	Oviedo
Escuela polimática	Oviedo	Oviedo	Oviedo	Oviedo
Nuestra Señora de Covadonga	Oviedo	Oviedo	Oviedo	Oviedo
Sagrado Corazón de Jesús	Carrión de los Condes	Palencia	Palencia	Valladolid
San Sebastián	Paredes de Nava	Palencia	Palencia	Valladolid
Academia científico-literaria	Tudela	Pamplona	Pamplona	Zaragoza
Colegio de Nuestra Señora del Puig	Estella	Pamplona	Pamplona	Zaragoza
Apóstol Santiago	Camposancos (Ayuntamiento de la Guardia)	Pontevedra	Pontevedra	Santiago
Colegio	Salamanca	Salamanca	Salamanca	Salamanca
Colegio	Salamanca	Salamanca	Salamanca	Salamanca
Colegio	Ciudad Rodrigo	Salamanca	Salamanca	Salamanca
Colegio	Béjar	Salamanca	Salamanca	Salamanca
Colegio	Peñaranda	Salamanca	Salamanca	Salamanca
Escuelas Pías de Villacarriedo	Villacarriedo	Santander	Santander	Valladolid
San Sebastián	Reinosa	Santander	Santander	Valladolid
San Juan Bautista	Santoña	Santander	Santander	Valladolid
(Sin nombre)	Torrelavega	Santander	Santander	Valladolid
Colegio	Betanzos	Coruña	Santiago	Santiago
Colegio	Ferrol	Coruña	Santiago	Santiago
Colegio	Ferrol	Coruña	Santiago	Santiago
Colegio	Santiago	Coruña	Santiago	Santiago
Colegio	Santiago	Coruña	Santiago	Santiago
La Educación	Segovia	Segovia	Segovia	Madrid
San Ildefonso	San Ildefonso	Segovia	Segovia	Madrid
San Diego	Sevilla	Sevilla	Sevilla	Sevilla
San José	Carmona	Sevilla	Sevilla	Sevilla
San Fernando	Sevilla	Sevilla	Sevilla	Sevilla
San Fulgencio	Écija	Sevilla	Sevilla	Sevilla
San Francisco de Asís	Sevilla	Sevilla	Sevilla	Sevilla
San Leandro	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora del Carmen	Sevilla	Sevilla	Sevilla	Sevilla

Espíritu Santo	Sevilla	Sevilla	Sevilla	Sevilla
San Luis Gonzaga	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora de la Consolación	Utrera	Sevilla	Sevilla	Sevilla
El Salvador	Sevilla	Sevilla	Sevilla	Sevilla
San Isidoro	Sevilla	Sevilla	Sevilla	Sevilla
Jesús María José	Sevilla	Sevilla	Sevilla	Sevilla
San Ramon	Sevilla	Sevilla	Sevilla	Sevilla
San Lorenzo	Sevilla	Sevilla	Sevilla	Sevilla
San Hermenegildo	Sevilla	Sevilla	Sevilla	Sevilla
[S]ismo. Corazón de María	Sevilla	Sevilla	Sevilla	Sevilla
Stismo. Sacramento	Sevilla	Sevilla	Sevilla	Sevilla
San Clemente	Sevilla	Sevilla	Sevilla	Sevilla
San Pelagio	Sevilla	Sevilla	Sevilla	Sevilla
San Ildefonso	Sevilla	Sevilla	Sevilla	Sevilla
Barbado	Sevilla	Sevilla	Sevilla	Sevilla
San Martín	Sevilla	Sevilla	Sevilla	Sevilla
Purísima Concepción	Osuna	Sevilla	Sevilla	Sevilla
Tarragona	Tarragona	Tarragona	Tarragona	Barcelona
San Luis Gonzaga	Tortosa	Tarragona	Tarragona	Barcelona
de D. Baltasar Noria	Tortosa	Tarragona	Tarragona	Barcelona
Vallense	Valls	Tarragona	Tarragona	Barcelona
Santo Tomás	Valls	Tarragona	Tarragona	Barcelona
Reusense	Reus	Tarragona	Tarragona	Barcelona
Escuelas Pías	Albarracín	Teruel	Teruel	Zaragoza
Escuelas Pías	Alcañiz	Teruel	Teruel	Zaragoza
Nuestra Señora del Prado	Talavera de la Reina	Toledo	Toledo	Madrid
San Francisco	Puebla de Montalbán	Toledo	Toledo	Madrid
San Fernando	Madridejos	Toledo	Toledo	Madrid
Escuelas Pías	Valencia	Valencia	Valencia	Valencia
Escuelas Pías	Gandía	Valencia	Valencia	Valencia
Escuelas Pías	Utiel	Valencia	Valencia	Valencia

Escuelas Pías	Játiva	Valencia	Valencia	Valencia
Escuelas Pías	Alcira	Valencia	Valencia	Valencia
Angelico del Cid	Valencia	Valencia	Valencia	Valencia
Valentino	Valencia	Valencia	Valencia	Valencia
San José	Valencia	Valencia	Valencia	Valencia
de la Concepción	Valencia	Valencia	Valencia	Valencia
Luis Vives	Valencia	Valencia	Valencia	Valencia
Politécnico	Valencia	Valencia	Valencia	Valencia
Sueca	Sueca	Valencia	Valencia	Valencia
San Luis Gonzaga	Carcagente	Valencia	Valencia	Valencia
Santo Tomás	Játiva	Valencia	Valencia	Valencia
San Isidro	Carcagente	Valencia	Valencia	Valencia
La Providencia	Valladolid	Valladolid	Valladolid	Valladolid
de D. Pedro Regalado	Valladolid	Valladolid	Valladolid	Valladolid
San Ildefonso	Valladolid	Valladolid	Valladolid	Valladolid
Santo Tomás	Valladolid	Valladolid	Valladolid	Valladolid
San Buenaventura	Rioseco	Valladolid	Valladolid	Valladolid
San Juan Evangelista	Nava del Rey	Valladolid	Valladolid	Valladolid
San Antolín	Medina del Campo	Valladolid	Valladolid	Valladolid
La Unión	Peñafiel	Valladolid	Valladolid	Valladolid
Orduña	Orduña	Valladolid	Valladolid	Valladolid
Colegio	Toro	Zamora	Zamora	Salamanca
Escuelas Pías	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías	Caspe	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías	Daroca	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías	Sos	Zaragoza	Zaragoza	Zaragoza
Colegio de 2ª enseñanza	Calatayud	Zaragoza	Zaragoza	Zaragoza
del Salvador	Zaragoza	Zaragoza	Zaragoza	Zaragoza
San Felipe	Zaragoza	Zaragoza	Zaragoza	Zaragoza
San Fernando	Zaragoza	Zaragoza	Zaragoza	Zaragoza
San José	Zaragoza	Zaragoza	Zaragoza	Zaragoza

San Miguel	Zaragoza	Zaragoza	Zaragoza	Zaragoza
de la Concepción	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Ángel de las Escuelas	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Politécnico de Nuestra Señora del Pilar	Zaragoza	Zaragoza	Zaragoza	Zaragoza

D.2.4 Year 1889

Table D.5. Private schools in year 1889

Nombre	**Municipio**	**Provincia**	***Instituto***	**Distrito universitario**
Sagrado Corazón de Jesús	Zuia	Álava	Vitoria	Valladolid
Salvador	Hellín	Albacete	Albacete	Valencia
Politécnico	La Roda	Albacete	Albacete	Valencia
San Jorge	Alcoy	Alicante	Alicante	Valencia
San Rafael	Alcoy	Alicante	Alicante	Valencia
San José	Alicante	Alicante	Alicante	Valencia
San Luis Gonzaga	Alicante	Alicante	Alicante	Valencia
Nuestra Señora del Sufragio	Benidorm	Alicante	Alicante	Valencia
Nuestra Señora de las Injurias	Callosa d'en Sarrià	Alicante	Alicante	Valencia
San Buenaventura	Cocentaina	Alicante	Alicante	Valencia
Nuestra Señora de la Asunción	Elche	Alicante	Alicante	Valencia
Virgen del Remedio	Monóvar	Alicante	Alicante	Valencia
Inmaculada Concepción	Novelda	Alicante	Alicante	Valencia
Santo Domingo (jesuitas)	Orihuela	Alicante	Alicante	Valencia
Santo Tomás de Aquino	Pedreguer	Alicante	Alicante	Valencia
Inmaculada Concepción	Torrevieja	Alicante	Alicante	Valencia
Santa Marta	Villajoyosa	Alicante	Alicante	Valencia
San Fernando	Villena	Alicante	Alicante	Valencia
Colegio	Albox	Almería	Almería	Granada
San Antonio	Alhabia	Almería	Almería	Granada
Encarnación	Almería	Almería	Almería	Granada
Jesús	Almería	Almería	Almería	Granada
San Pablo	Almería	Almería	Almería	Granada
Nuestra Señora de Gádor	Berja	Almería	Almería	Granada
Nuestra Señora del Carmen	Cuevas del Almanzora	Almería	Almería	Granada
Purísima Concepción	Huércal-Overa	Almería	Almería	Granada
Nuestra Señora de las Mercedes	Oria	Almería	Almería	Granada
Santiago	Terque	Almería	Almería	Granada
Nuestra Señora del Carmen	Vélez-Rubio	Almería	Almería	Granada

Santo Tomás de Aquino	Vera	Almería	Almería	Granada
Santo Tomás de Aquino	Arévalo	Ávila	Ávila	Salamanca
Santa Teresa de Jesús	Piedrahíta	Ávila	Ávila	Salamanca
Nuestra Señora de la Piedad	Almendralejo	Badajoz	Badajoz	Sevilla
San Luis	Azuaga	Badajoz	Badajoz	Sevilla
Colegio de Santo Domingo	Badajoz	Badajoz	Badajoz	Sevilla
El Carmen	Badajoz	Badajoz	Badajoz	Sevilla
San Luis Gonzaga	Badajoz	Badajoz	Badajoz	Sevilla
Casa Pensión	Badajoz	Badajoz	Badajoz	Sevilla
Colegio de Cervantes	Badajoz	Badajoz	Badajoz	Sevilla
San José	Barcarrota	Badajoz	Badajoz	Sevilla
Nuestra Señora de Armentera	Cabeza del Buey	Badajoz	Badajoz	Sevilla
Colegio de segunda enseñanza de Don Benito	Don Benito	Badajoz	Badajoz	Sevilla
Colegio en Don Benito	Don Benito	Badajoz	Badajoz	Sevilla
Colegio en Jerez de los Caballeros	Jerez de los Caballeros	Badajoz	Badajoz	Sevilla
Nuestra Señora de la Granada	Llerena	Badajoz	Badajoz	Sevilla
Colegio en Mérida	Mérida	Badajoz	Badajoz	Sevilla
El Emeritense	Mérida	Badajoz	Badajoz	Sevilla
Colegio de segunda enseñanza de Olivenza	Olivenza	Badajoz	Badajoz	Sevilla
San Benito	Villanueva de la Serena	Badajoz	Badajoz	Sevilla
La Purísima Concepción	Zafra	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
San Antonio Abad	Ciutadella de Menorca	Baleares	Palma	Barcelona
Colegio de Ibiza	Ibiza	Baleares	Palma	Barcelona
Santo Tomás de Aquino	Inca	Baleares	Palma	Barcelona
San Juan Berchmans	Mahón/Maó	Baleares	Palma	Barcelona
Colegio de Manacor	Manacor	Baleares	Palma	Barcelona
Santa Teresa	Marratxí	Baleares	Palma	Barcelona
Del Divino Corazón	Palma	Baleares	Palma	Barcelona
San Buenaventura	Palma	Baleares	Palma	Barcelona

San Sebastián	Palma	Baleares	Palma	Barcelona
Insular	Palma	Baleares	Palma	Barcelona
Palmerano	Palma	Baleares	Palma	Barcelona
Nuestra Señora de los Ángeles	Pollença	Baleares	Palma	Barcelona
Beato Ramón Llull	Santa María del Camí	Baleares	Palma	Barcelona
San José	Badalona	Barcelona	Barcelona	Barcelona
Solá y Seriol	Badalona	Barcelona	Barcelona	Barcelona
Jesús	Barcelona	Barcelona	Barcelona	Barcelona
Jesús, María y José	Barcelona	Barcelona	Barcelona	Barcelona
Sagrado Corazón de Jesús	Barcelona	Barcelona	Barcelona	Barcelona
San Agustín	Barcelona	Barcelona	Barcelona	Barcelona
San Andrés	Barcelona	Barcelona	Barcelona	Barcelona
San Antonio Abad	Barcelona	Barcelona	Barcelona	Barcelona
San Buenaventura	Barcelona	Barcelona	Barcelona	Barcelona
San Francisco de Paula	Barcelona	Barcelona	Barcelona	Barcelona
San Isidoro	Barcelona	Barcelona	Barcelona	Barcelona
San Isidro Labrador	Barcelona	Barcelona	Barcelona	Barcelona
San José (Sr. Ferrando)	Barcelona	Barcelona	Barcelona	Barcelona
San José de Calasanz	Barcelona	Barcelona	Barcelona	Barcelona
San Juan	Barcelona	Barcelona	Barcelona	Barcelona
San Luis	Barcelona	Barcelona	Barcelona	Barcelona
San Miguel	Barcelona	Barcelona	Barcelona	Barcelona
San Vicente	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás (D. José Martí)	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás (Sr. Miralles)	Barcelona	Barcelona	Barcelona	Barcelona
Barcelonés	Barcelona	Barcelona	Barcelona	Barcelona
Carmen	Barcelona	Barcelona	Barcelona	Barcelona
Carreras	Barcelona	Barcelona	Barcelona	Barcelona
Cataluña	Barcelona	Barcelona	Barcelona	Barcelona
Cisneros	Barcelona	Barcelona	Barcelona	Barcelona
D. Antonio Martínez	Barcelona	Barcelona	Barcelona	Barcelona

D. Cándido Antiga	Barcelona	Barcelona	Barcelona	Barcelona
D. Claudio Mimó	Barcelona	Barcelona	Barcelona	Barcelona
D. Francisco Ferrer	Barcelona	Barcelona	Barcelona	Barcelona
D. Gonzalo Cortada	Barcelona	Barcelona	Barcelona	Barcelona
D. Guillermo L. Galavotti	Barcelona	Barcelona	Barcelona	Barcelona
D. José Aldavert	Barcelona	Barcelona	Barcelona	Barcelona
D. Luis Cardona	Barcelona	Barcelona	Barcelona	Barcelona
D. Ramón Arquez	Barcelona	Barcelona	Barcelona	Barcelona
D. Ramón Miró	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico (Sr. Nuri)	Barcelona	Barcelona	Barcelona	Barcelona
Jovellanos	Barcelona	Barcelona	Barcelona	Barcelona
Liceo Políglota	Barcelona	Barcelona	Barcelona	Barcelona
Martínez Subirá	Barcelona	Barcelona	Barcelona	Barcelona
Peninsular	Barcelona	Barcelona	Barcelona	Barcelona
Vilar	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Barcelona	Barcelona	Barcelona	Barcelona	Barcelona
Saló	Berga	Barcelona	Barcelona	Barcelona
Escuelas Pías de Calella	Calella	Barcelona	Barcelona	Barcelona
Sagrado Corazón	Granollers	Barcelona	Barcelona	Barcelona
San Francisco	Granollers	Barcelona	Barcelona	Barcelona
Granollers	Granollers	Barcelona	Barcelona	Barcelona
Escuelas Pías de Igualada	Igualada	Barcelona	Barcelona	Barcelona
Colegio de San Ignacio	Manresa	Barcelona	Barcelona	Barcelona
D. José Solá	Manresa	Barcelona	Barcelona	Barcelona
Balmes	El Masnou	Barcelona	Barcelona	Barcelona
Valdemia	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Mataró	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Moià	Moià	Barcelona	Barcelona	Barcelona
Escuelas Pías de Sabadell	Sabadell	Barcelona	Barcelona	Barcelona
San Sadurní	Sant Sadurní d'Anoia	Barcelona	Barcelona	Barcelona

San Juan Cadevall	Terrassa	Barcelona	Barcelona	Barcelona
Tarrasense	Terrassa	Barcelona	Barcelona	Barcelona
Colegio privado	Vic	Barcelona	Barcelona	Barcelona
San Raimundo Peñafort, Padres de la Sagrada Familia	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
D. Antonio Trullás	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
D. Pablo Tort	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
J. Vives	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
Escuelas Pías de Villanueva y la Geltrú	Vilanova i la Geltrú	Barcelona	Barcelona	Barcelona
Vera-cruz	Aranda de Duero	Burgos	Burgos	Valladolid
Colegio de segunda enseñanza	Aranda de Duero	Burgos	Burgos	Valladolid
San Nicolás de Bari	Briviesca	Burgos	Burgos	Valladolid
D. Enrique España	Briviesca	Burgos	Burgos	Valladolid
San Gil	Burgos	Burgos	Burgos	Valladolid
San José	Burgos	Burgos	Burgos	Valladolid
San Luis Gonzaga	Burgos	Burgos	Burgos	Valladolid
Santa Cruz	Burgos	Burgos	Burgos	Valladolid
D. Gregorio del Castillo	Burgos	Burgos	Burgos	Valladolid
Hispano Latino	Burgos	Burgos	Burgos	Valladolid
San José	Castrojeriz	Burgos	Burgos	Valladolid
San José	Covarrubias	Burgos	Burgos	Valladolid
La Purísima Concepción	Lerma	Burgos	Burgos	Valladolid
Nuestra Señora del Rosario	Medina de Pomar	Burgos	Burgos	Valladolid
Sagrados corazones de Jesús y María	Miranda de Ebro	Burgos	Burgos	Valladolid
Purísima Concepción	Plasencia	Cáceres	Cáceres	Salamanca
San José	Alcalá de los Gazules	Cádiz	Jerez	Sevilla
Nuestra Señora de la Palma	Algeciras	Cádiz	Cádiz	Sevilla
Colegio de primera y segunda enseñanza	Algeciras	Cádiz	Cádiz	Sevilla
San Alberto	Cádiz	Cádiz	Cádiz	Sevilla
San Bernardo	Cádiz	Cádiz	Cádiz	Sevilla
San Buenaventura	Cádiz	Cádiz	Cádiz	Sevilla
San Clemente	Cádiz	Cádiz	Cádiz	Sevilla

San Felipe Neri	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco de Paula	Cádiz	Cádiz	Cádiz	Sevilla
San Jerónimo	Cádiz	Cádiz	Cádiz	Sevilla
San Nicolás de Tolentino	Cádiz	Cádiz	Cádiz	Sevilla
San Rafael	Cádiz	Cádiz	Cádiz	Sevilla
Institución gaditana de enseñanza	Cádiz	Cádiz	Cádiz	Sevilla
San Rafael	Chiclana de la Frontera	Cádiz	Cádiz	Sevilla
La Purísima Concepción	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San José	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San Juan Baustista	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San Rafael	Jerez de la Frontera	Cádiz	Jerez	Sevilla
Santo Tomás de Aquino	Jerez de la Frontera	Cádiz	Jerez	Sevilla
Nuestra Señora del Carmen	Medina Sidonia	Cádiz	Jerez	Sevilla
San Cayetano	El Puerto de Santa María	Cádiz	Jerez	Sevilla
San Luis Gonzaga (jesuitas)	El Puerto de Santa María	Cádiz	Jerez	Sevilla
D. Tirso Sánchez Cisneros	El Puerto de Santa María	Cádiz	Cádiz	Sevilla
Nuestra Señora del Carmen	San Fernando	Cádiz	Cádiz	Sevilla
Pascua	San Fernando	Cádiz	Jerez	Sevilla
San Cayetano	San Fernando	Cádiz	Jerez	Sevilla
San Luis Gonzaga (antiguo)	San Fernando	Cádiz	Cádiz	Sevilla
San Luis Gonzaga (moderno)	San Fernando	Cádiz	Cádiz	Sevilla
D. Manuel de la Pascua	San Fernando	Cádiz	Cádiz	Sevilla
San Francisco Javier	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Escuelas Pías de Sanlúcar de Barrameda	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Santo Tomás de Aquino	San Roque	Cádiz	Cádiz	Sevilla
San Luis Gonzaga	Tarifa	Cádiz	Jerez	Sevilla
Vinaroz	Vinaròs	Castellón	Castellón	Valencia
San Isidoro	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
El Certamen	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
Segunda Enseñanza de Almadén	Almadén	Ciudad Real	Ciudad Real	Madrid
San José	Daimiel	Ciudad Real	Ciudad Real	Madrid

Nuestra Señora de la Consolación	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Balbuena	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Nuestra Señora de la Concepción y San José	Aguilar de la Frontera	Córdoba	Cabra	Sevilla
Nuestra Señora de la Sierra	Cabra	Córdoba	Cabra	Sevilla
Purísima Concepción	Cabra	Córdoba	Cabra	Sevilla
San Francisco Solano	Montilla	Córdoba	Cabra	Sevilla
Nuestra Señora de la Concepción y San José	Puente Genil	Córdoba	Cabra	Sevilla
Betanzos	Betanzos	Coruña	Coruña	Santiago
Colegio de Betanzos	Betanzos	Coruña	Santiago	Santiago
Colegio de Anceis	Cambre	Coruña	Santiago	Santiago
Santa María de Cée	Cee	Coruña	Santiago	Santiago
Católico	A Coruña	Coruña	Coruña	Santiago
Dequidt	A Coruña	Coruña	Coruña	Santiago
Católico	Ferrol	Coruña	Coruña	Santiago
Sagrado Corazón	Ferrol	Coruña	Coruña	Santiago
Santo Tomás de Aquino	Ferrol	Coruña	Coruña	Santiago
Colegio de El Ferrol	Ferrol	Coruña	Santiago	Santiago
La Marina	Ferrol	Coruña	Coruña	Santiago
Masquelet	Ferrol	Coruña	Coruña	Santiago
Pueyo	Ferrol	Coruña	Coruña	Santiago
San Luis Gonzaga	Noia	Coruña	Santiago	Santiago
Colegio de Padrón	Padrón	Coruña	Santiago	Santiago
De San José	Santiago de Compostela	Coruña	Santiago	Santiago
Inmaculada Concepción	Santiago de Compostela	Coruña	Santiago	Santiago
Santo Tomás de Aquino	Santiago de Compostela	Coruña	Santiago	Santiago
Escuelas Pías de Almodóvar del Pinar	Almodóvar del Pinar	Cuenca	Cuenca	Valencia
Purísima Concepción	Huete	Cuenca	Cuenca	Valencia
Galileo	San Clemente	Cuenca	Cuenca	Valencia
Nuestra Señora de las Nieves	Villanueva de la Jara	Cuenca	Cuenca	Valencia
San José	La Bisbal d'Empordà	Gerona	Gerona	Barcelona
Bisbalense	La Bisbal d'Empordà	Gerona	Gerona	Barcelona

Colegio de La Bisbal	La Bisbal d'Empordà	Gerona	Gerona	Barcelona
Santa María	Blanes	Gerona	Gerona	Barcelona
Colegio de Blanes	Blanes	Gerona	Gerona	Barcelona
San Narciso	Gerona	Gerona	Gerona	Barcelona
Academia Gerundense	Gerona	Gerona	Gerona	Barcelona
D. Juan Carreras	Gerona	Gerona	Gerona	Barcelona
Colegio de Lloret de Mar	Lloret de Mar	Gerona	Gerona	Barcelona
Escuelas Pías de Olot	Olot	Gerona	Gerona	Barcelona
Academia Palafrugellense	Palafrugell	Gerona	Gerona	Barcelona
Escuelas Pías de Puigcerdà	Puigcerdà	Gerona	Gerona	Barcelona
Santa María de Ripoll	Ripoll	Gerona	Gerona	Barcelona
Colegio de Sant Feliu de Guíxols	Sant Feliu de Guíxols	Gerona	Gerona	Barcelona
Vidal	Sant Feliu de Guíxols	Gerona	Gerona	Barcelona
Escuelas Pías de El Torn	Sant Ferriol	Gerona	Gerona	Barcelona
Nuestra Señora de Farnés	Santa Coloma de Farners	Gerona	Gerona	Barcelona
La Purísima Concepción	Baza	Granada	Granada	Granada
Santo Tomás de Aquino	Baza	Granada	Granada	Granada
Jesús Nazareno	Granada	Granada	Granada	Granada
La Purísima Concepción	Granada	Granada	Granada	Granada
San Bartolomé y Santiago	Granada	Granada	Granada	Granada
San Luis	Granada	Granada	Granada	Granada
San Miguel	Granada	Granada	Granada	Granada
San Pablo	Granada	Granada	Granada	Granada
Santo Tomás de Aquino	Granada	Granada	Granada	Granada
Colegio preparatorio militar	Granada	Granada	Granada	Granada
Escuelas Pías del Dulce Nombre de María	Granada	Granada	Granada	Granada
San José	Loja	Granada	Granada	Granada
Politécnico	Motril	Granada	Granada	Granada
Huérfanos de la guerra	Guadalajara	Guadalajara	Guadalajara	Madrid
Escuelas Pías de Molina de Aragón	Molina de Aragón	Guadalajara	Guadalajara	Madrid
Purísima Concepción	Sigüenza	Guadalajara	Guadalajara	Madrid

San Luis	Irun	Guipúzcoa	Guipúzcoa	Valladolid
Escuelas Pías de Tolosa	Tolosa	Guipúzcoa	Guipúzcoa	Valladolid
Real Seminario (Dominicos)	Bergara	Guipúzcoa	Guipúzcoa	Valladolid
San José	Moguer	Huelva	Huelva	Sevilla
Escuelas Pías de Barbastro	Barbastro	Huesca	Huesca	Zaragoza
Escuelas Pías de Fraga	Fraga	Huesca	Huesca	Zaragoza
Escuelas Pías de Jaca	Jaca	Huesca	Huesca	Zaragoza
Escuelas Pías de Peralta de Calasanz	Peralta de Calasanz	Huesca	Huesca	Zaragoza
Escuelas Pías de Tamarite	Tamarite de Litera	Huesca	Huesca	Zaragoza
Nuestra Señora de las Mercedes	Alcalá la Real	Jaén	Jaén	Granada
Santo Domingo de Silos	Alcalá la Real	Jaén	Jaén	Granada
Andújar	Andújar	Jaén	Jaén	Granada
Colegio privado de Baeza	Baeza	Jaén	Jaén	Granada
Colegio privado de la Carolina	La Carolina	Jaén	Jaén	Granada
Castellar	Castellar	Jaén	Jaén	Granada
Santo Tomás	Jaén	Jaén	Jaén	Granada
Linares	Linares	Jaén	Jaén	Granada
Linares	Linares	Jaén	Jaén	Granada
Establecimiento privado	Úbeda	Jaén	Jaén	Granada
Escuelas Pías de Úbeda	Úbeda	Jaén	Jaén	Granada
Colegio privado de Villarrillo (Villacarrillo?)	Villacarrillo	Jaén	Jaén	Granada
Colegio privado de Villanueva del Arzobispo	Villanueva del Arzobispo	Jaén	Jaén	Granada
De San Vicente Ferrer	Astorga	León	León	Oviedo
La Bañeza	La Bañeza	León	León	Oviedo
Ponferrada	Ponferrada	León	León	Oviedo
De San Mateo	Valderas	León	León	Oviedo
De San José (Agustinos)	Valencia de Don Juan	León	León	Oviedo
De la Purísima Concepción	Villafranca del Bierzo	León	León	Oviedo
Escuelas Pías de Balaguer	Balaguer	Lérida	Lérida	Barcelona
Padres Misioneros del Corazón de María	Cervera	Lérida	Lérida	Barcelona
Guissona	Guissona	Lérida	Lérida	Barcelona

Sagrado Corazón de Jesús	Oliana	Lérida	Lérida	Barcelona
Pobla de Segur	Pobla de Segur	Lérida	Lérida	Barcelona
Escuelas Pías de Tárrega	Tàrrega	Lérida	Lérida	Barcelona
Colegio privado de Alfaro	Alfaro	Logroño	Logroño	Zaragoza
El Alfarense	Alfaro	Logroño	Logroño	Zaragoza
La Concepción	Haro	Logroño	Logroño	Zaragoza
Sagrado Corazón de Jesús	Haro	Logroño	Logroño	Zaragoza
Colegio privado de Haro	Haro	Logroño	Logroño	Zaragoza
Colegio privado de Logroño	Logroño	Logroño	Logroño	Zaragoza
Colegio privado de Rasillo de Cameros	Rasillo de Cameros	Logroño	Logroño	Zaragoza
Nuestra Señora de los Remedios	Mondoñedo	Lugo	Lugo	Santiago
Escuelas Pías de Monforte	Monforte de Lemos	Lugo	Lugo	Santiago
Complutense	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Ildefonso	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
El Salvador	Aranjuez	Madrid	Madrid-Noviciado	Madrid
Real Colegio del Escorial	El Escorial	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de Getafe	Getafe	Madrid	Madrid-San Isidro	Madrid
Ángel de las Escuelas	Madrid	Madrid	Madrid-Noviciado	Madrid
Asociación de Católicos	Madrid	Madrid	n.d.	Madrid
Católico	Madrid	Madrid	Madrid-Noviciado	Madrid
Corazón de Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
de la Cruz	Madrid	Madrid	Madrid-San Isidro	Madrid
de la Inmaculada Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
de la Purísima Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
de San Ignacio	Madrid	Madrid	Madrid-Noviciado	Madrid
de San Luis	Madrid	Madrid	n.d.	Madrid
del Salvador	Madrid	Madrid	Madrid-Noviciado	Madrid
Isabel la Católica	Madrid	Madrid	Madrid-Noviciado	Madrid
Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
Niñas huérfanas de la Concepción	Madrid	Madrid	n.d.	Madrid
Niño Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid

Nuestra Señora del Recuerdo	Madrid	Madrid	Madrid-San Isidro	Madrid
San Agustín	Madrid	Madrid	Madrid-Noviciado	Madrid
San Agustín	Madrid	Madrid	Madrid-San Isidro	Madrid
San Alberto	Madrid	Madrid	Madrid-Noviciado	Madrid
San Alfonso María de Ligorio	Madrid	Madrid	Madrid-San Isidro	Madrid
San Antonio	Madrid	Madrid	Madrid-San Isidro	Madrid
San Bernardo	Madrid	Madrid	Madrid-Noviciado	Madrid
San Carlos	Madrid	Madrid	Madrid-Noviciado	Madrid
San Casiano	Madrid	Madrid	Madrid-Noviciado	Madrid
San Fermín	Madrid	Madrid	Madrid-Noviciado	Madrid
San Fernando	Madrid	Madrid	Madrid-San Isidro	Madrid
San Francisco de Asís	Madrid	Madrid	Madrid-San Isidro	Madrid
San Francisco Javier	Madrid	Madrid	Madrid-Noviciado	Madrid
San Gregorio	Madrid	Madrid	Madrid-Noviciado	Madrid
San Ildefonso	Madrid	Madrid	Madrid-Noviciado	Madrid
San Isidoro	Madrid	Madrid	Madrid-San Isidro	Madrid
San José	Madrid	Madrid	Madrid-San Isidro	Madrid
San Juan Bautista	Madrid	Madrid	Madrid-Noviciado	Madrid
San Juan Crisóstomo	Madrid	Madrid	Madrid-San Isidro	Madrid
San Julián	Madrid	Madrid	Madrid-Noviciado	Madrid
San Laureano	Madrid	Madrid	Madrid-Noviciado	Madrid
San Lorenzo	Madrid	Madrid	Madrid-San Isidro	Madrid
San Luis Gonzaga	Madrid	Madrid	Madrid-San Isidro	Madrid
San Marcos	Madrid	Madrid	Madrid-San Isidro	Madrid
San Mateo	Madrid	Madrid	Madrid-Noviciado	Madrid
San Mauricio	Madrid	Madrid	Madrid-Noviciado	Madrid
San Miguel	Madrid	Madrid	Madrid-Noviciado	Madrid
San Miguel	Madrid	Madrid	Madrid-San Isidro	Madrid
San Miguel Arcángel	Madrid	Madrid	Madrid-Noviciado	Madrid
San Miguel de los Santos	Madrid	Madrid	Madrid-San Isidro	Madrid
San Millán	Madrid	Madrid	Madrid-San Isidro	Madrid

San Pablo	Madrid	Madrid	Madrid-Noviciado	Madrid
San Pedro	Madrid	Madrid	Madrid-Noviciado	Madrid
San Pío V	Madrid	Madrid	Madrid-Noviciado	Madrid
San Rafael	Madrid	Madrid	Madrid-San Isidro	Madrid
San Vicente Ferrer	Madrid	Madrid	Madrid-Noviciado	Madrid
Santa Isabel	Madrid	Madrid	n.d.	Madrid
Santiago Apóstol	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Ángel de la Guarda	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Tomás	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Tomás de Aquino	Madrid	Madrid	Madrid-Noviciado	Madrid
Teresiano	Madrid	Madrid	Madrid-San Isidro	Madrid
Academia	Madrid	Madrid	n.d.	Madrid
Academia de Palet	Madrid	Madrid	n.d.	Madrid
Alfonso el Sabio	Madrid	Madrid	Madrid-Noviciado	Madrid
Aroca	Madrid	Madrid	Madrid-San Isidro	Madrid
Barrio de Argüelles	Madrid	Madrid	Madrid-Noviciado	Madrid
Cabero	Madrid	Madrid	Madrid-Noviciado	Madrid
Calderón de la Barca	Madrid	Madrid	Madrid-Noviciado	Madrid
Cardenal Cisneros	Madrid	Madrid	Madrid-San Isidro	Madrid
Carpetano	Madrid	Madrid	Madrid-Noviciado	Madrid
Centro de Enseñanza	Madrid	Madrid	Madrid-San Isidro	Madrid
Cicerón	Madrid	Madrid	Madrid-San Isidro	Madrid
Clásico Español	Madrid	Madrid	Madrid-Noviciado	Madrid
Clásico Romano	Madrid	Madrid	Madrid-Noviciado	Madrid
Colegio-Asamblea del distrito del Hospital	Madrid	Madrid	n.d.	Madrid
Colón	Madrid	Madrid	Madrid-Noviciado	Madrid
de Carabanchel	Madrid	Madrid	n.d.	Madrid
de D. Fermín Martínez	Madrid	Madrid	n.d.	Madrid
de Gómez Paredes	Madrid	Madrid	n.d.	Madrid
de la Providencia	Madrid	Madrid	n.d.	Madrid
de López García	Madrid	Madrid	Madrid-San Isidro	Madrid

del Ángel	Madrid	Madrid	n.d.	Madrid
Escuela Politécnica	Madrid	Madrid	Madrid-San Isidro	Madrid
Español	Madrid	Madrid	Madrid-San Isidro	Madrid
Español Francés	Madrid	Madrid	Madrid-San Isidro	Madrid
Figueroa	Madrid	Madrid	Madrid-San Isidro	Madrid
Fray Luis de León	Madrid	Madrid	Madrid-Noviciado	Madrid
Hispano Francés	Madrid	Madrid	Madrid-San Isidro	Madrid
Hispano Romano	Madrid	Madrid	Madrid-Noviciado	Madrid
Hispano-Americano	Madrid	Madrid	Madrid-Noviciado	Madrid
Ibérico	Madrid	Madrid	Madrid-San Isidro	Madrid
Ibérico	Madrid	Madrid	Madrid-Noviciado	Madrid
Jardines de la Adolescencia	Madrid	Madrid	Madrid-Noviciado	Madrid
Jovellanos	Madrid	Madrid	Madrid-Noviciado	Madrid
Latino-Español	Madrid	Madrid	Madrid-San Isidro	Madrid
Liceo Americano de Santa Isabel	Madrid	Madrid	n.d.	Madrid
Loreto	Madrid	Madrid	n.d.	Madrid
Madrileño	Madrid	Madrid	n.d.	Madrid
Martínez de la Rosa	Madrid	Madrid	Madrid-Noviciado	Madrid
Matritense	Madrid	Madrid	Madrid-Noviciado	Madrid
Niñas de Leganés	Madrid	Madrid	n.d.	Madrid
Pensión Cervantes	Madrid	Madrid	Madrid-San Isidro	Madrid
Piñera	Madrid	Madrid	Madrid-Noviciado	Madrid
Pogonoski	Madrid	Madrid	n.d.	Madrid
Pontes	Madrid	Madrid	n.d.	Madrid
Pontes	Madrid	Madrid	Madrid-Noviciado	Madrid
Romano	Madrid	Madrid	Madrid-San Isidro	Madrid
Escuelas Pías de San Antonio Abad	Madrid	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Fernando	Madrid	Madrid	Madrid-San Isidro	Madrid
El Cardenal	Torrelaguna	Madrid	Madrid-Noviciado	Madrid
San Miguel	Álora	Málaga	Málaga	Granada
San Luis Gonzaga	Antequera	Málaga	Málaga	Granada

Escuelas Pías de Archidona	Archidona	Málaga	Málaga	Granada
San Juan Bautista	Coín	Málaga	Málaga	Granada
San Estanislao (jesuitas)	Málaga	Málaga	Málaga	Granada
San Hermenegildo	Málaga	Málaga	Málaga	Granada
San Jorge	Málaga	Málaga	Málaga	Granada
San José	Málaga	Málaga	Málaga	Granada
San Miguel	Málaga	Málaga	Málaga	Granada
San Rafael	Málaga	Málaga	Málaga	Granada
Academia Politécnica	Málaga	Málaga	Málaga	Granada
del Ángel	Málaga	Málaga	Málaga	Granada
Español	Málaga	Málaga	Málaga	Granada
San Miguel	Nerja	Málaga	Málaga	Granada
San Cayetano	Riogordo	Málaga	Málaga	Granada
San Rafael	Vélez-Málaga	Málaga	Málaga	Granada
San José	Águilas	Murcia	Murcia	Valencia
El Salvador	Caravaca de la Cruz	Murcia	Murcia	Valencia
Santísima Cruz	Caravaca de la Cruz	Murcia	Murcia	Valencia
Cuatro Santos	Cartagena	Murcia	Murcia	Valencia
San Diego	Cartagena	Murcia	Murcia	Valencia
San Fulgencio	Cartagena	Murcia	Murcia	Valencia
San Isidoro	Cartagena	Murcia	Murcia	Valencia
San Luis	Cartagena	Murcia	Murcia	Valencia
Santísima Trinidad	Cartagena	Murcia	Murcia	Valencia
San Luis Gonzaga	Cieza	Murcia	Murcia	Valencia
San Pascual	Jumilla	Murcia	Murcia	Valencia
Purísima Concepción	Lorca	Murcia	Murcia	Valencia
El Niño Jesús de Belén	Mula	Murcia	Murcia	Valencia
Santa Eulalia	Totana	Murcia	Murcia	Valencia
La Unión	La Unión	Murcia	Murcia	Valencia
Escuelas Pías de Yecla	Yecla	Murcia	Murcia	Valencia
Nuestra Señora del Puy	Estella-Lizarra	Navarra	Pamplona	Zaragoza

Escuelas Pías de Tafalla	Tafalla	Navarra	Pamplona	Zaragoza
Academia de segunda enseñanza	Tudela	Navarra	Pamplona	Zaragoza
Escuelas Pías de Celanova	Celanova	Orense	Orense	Santiago
Ribadavia	Ribadavia	Orense	Orense	Santiago
De la Merced	Avilés	Oviedo	Oviedo	Oviedo
De Segunda Enseñanza	Cangas del Narcea	Oviedo	Oviedo	Oviedo
De Nuestra Señora de Covadonga	Cangas de Onís	Oviedo	Oviedo	Oviedo
Cangas de Tineo	Valdés	Oviedo	Oviedo	Oviedo
De la Encarnación	Llanes	Oviedo	Oviedo	Oviedo
De Nuestra Señora de Covadonga	Oviedo	Oviedo	Oviedo	Oviedo
De Segunda Enseñanza	Tineo	Oviedo	Oviedo	Oviedo
De la Inmaculada Concepción	Villaviciosa	Oviedo	Oviedo	Oviedo
De San Francisco	Villaviciosa	Oviedo	Oviedo	Oviedo
San Matías	Astudillo	Palencia	Palencia	Valladolid
Sagrado Corazón de Jesús (jesuitas)	Carrión de los Condes	Palencia	Palencia	Valladolid
San Ignacio	Torquemada	Palencia	Palencia	Valladolid
San Luis Gonzaga	Villada	Palencia	Palencia	Valladolid
Colegio de segunda enseñanza	Arrecife	Canarias	Canarias	Sevilla
San Agustín	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
San Ignacio de Loyola	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
Apóstol Santiago (jesuitas)	A Guarda	Pontevedra	Pontevedra	Santiago
Sagrado Corazón de Jesús	Vigo	Pontevedra	Pontevedra	Santiago
Santo Tomás de Aquino	Vigo	Pontevedra	Pontevedra	Santiago
San Agustín	Vilagarcía de Arousa	Pontevedra	Pontevedra	Santiago
Santa Teresa de Jesús	Alba de Tormes	Salamanca	Salamanca	Salamanca
Colegio de Béjar	Béjar	Salamanca	Salamanca	Salamanca
San Cayetano	Ciudad Rodrigo	Salamanca	Salamanca	Salamanca
Santo Tomás de Aquino	Ledesma	Salamanca	Salamanca	Salamanca
San Miguel	Peñaranda de Bracamonte	Salamanca	Salamanca	Salamanca
San Ignacio de Loyola	Salamanca	Salamanca	Salamanca	Salamanca
Ateneo Salmantino	Salamanca	Salamanca	Salamanca	Salamanca

De Vitigudino	Vitigudino	Salamanca	Salamanca	Salamanca
Colegio de segunda enseñanza	Santa Cruz de la Palma	Canarias	Canarias	Sevilla
Santo Tomás	Santa Cruz de Tenerife	Canarias	Canarias	Sevilla
Establecimiento de segunda enseñanza	Santa Cruz de Tenerife	Canarias	Canarias	Sevilla
San Sebastián de Reinosa	Reinosa	Santander	Santander	Valladolid
San Juan Bautista de Santoña	Santoña	Santander	Santander	Valladolid
San José	Torrelavega	Santander	Santander	Valladolid
Escuelas Pías de Villacarriedo	Villacarriedo	Santander	Santander	Valladolid
Politécnico	Segovia	Segovia	Segovia	Madrid
San Teodomiro	Carmona	Sevilla	Sevilla	Sevilla
Nuestra Señora del Robledo	Constantina	Sevilla	Sevilla	Sevilla
Nuestra Señora de la Estrella	Coria del Río	Sevilla	Sevilla	Sevilla
San Fulgencio	Écija	Sevilla	Sevilla	Sevilla
Academia de Nebrija	Lebrija	Sevilla	Sevilla	Sevilla
Nuestra Señora de Letefilla	Lora del Río	Sevilla	Sevilla	Sevilla
San Isidoro	Marchena	Sevilla	Sevilla	Sevilla
El Morunense	Morón de la Frontera	Sevilla	Sevilla	Sevilla
La Purísima Concepción	Osuna	Sevilla	Sevilla	Sevilla
Colegio privado de Osuna	Osuna	Sevilla	Osuna	Sevilla
Espíritu Santo	Sevilla	Sevilla	Sevilla	Sevilla
Inmaculado Corazón de María	Sevilla	Sevilla	Sevilla	Sevilla
Jesús, María y José	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora de Todos los Santos	Sevilla	Sevilla	Sevilla	Sevilla
San Andrés	Sevilla	Sevilla	Sevilla	Sevilla
San Diego	Sevilla	Sevilla	Sevilla	Sevilla
San Fernando	Sevilla	Sevilla	Sevilla	Sevilla
San Francisco de Paula	Sevilla	Sevilla	Sevilla	Sevilla
San Hermenegildo	Sevilla	Sevilla	Sevilla	Sevilla
San Isidro	Sevilla	Sevilla	Sevilla	Sevilla
San Leandro	Sevilla	Sevilla	Sevilla	Sevilla
San Lorenzo	Sevilla	Sevilla	Sevilla	Sevilla

San Luis Gonzaga	Sevilla	Sevilla	Sevilla	Sevilla
San Pedro	Sevilla	Sevilla	Sevilla	Sevilla
San Pelagio	Sevilla	Sevilla	Sevilla	Sevilla
San Ramón	Sevilla	Sevilla	Sevilla	Sevilla
San Román	Sevilla	Sevilla	Sevilla	Sevilla
San Vicente de Paul	Sevilla	Sevilla	Sevilla	Sevilla
Santa Bárbara	Sevilla	Sevilla	Sevilla	Sevilla
Santo Ángel de la Guarda	Sevilla	Sevilla	Sevilla	Sevilla
Calasancio Hispalense	Sevilla	Sevilla	Sevilla	Sevilla
La Escuela Sevillana	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora de Consolación	Utrera	Sevilla	Sevilla	Sevilla
Nuestra Señora del Carmen (salesianos)	Utrera	Sevilla	Sevilla	Sevilla
Borjas del Campo	Les Borges del Camp	Tarragona	Tarragona	Barcelona
San Luis	Falset	Tarragona	Tarragona	Barcelona
Colegio de San Luis	Montblanc	Tarragona	Tarragona	Barcelona
Colegio de Montblanc	Montblanc	Tarragona	Tarragona	Barcelona
León XIII	Mont-roig del Camp	Tarragona	Tarragona	Barcelona
Nuestra Señora de la Misericordia	Reus	Tarragona	Tarragona	Barcelona
Colegio Reusense	Reus	Tarragona	Tarragona	Barcelona
Colegio de D. Ignacio Gual	Tarragona	Tarragona	Tarragona	Barcelona
Colegio de Falset	Tarragona	Tarragona	Tarragona	Barcelona
Colegio de Tarragona	Tarragona	Tarragona	Tarragona	Barcelona
Colegio Tarraconense	Tarragona	Tarragona	Tarragona	Barcelona
San Luis	Tortosa	Tarragona	Tarragona	Barcelona
Artesanos	Tortosa	Tarragona	Tarragona	Barcelona
Noria	Tortosa	Tarragona	Tarragona	Barcelona
Colegio de Santo Tomás	Valls	Tarragona	Tarragona	Barcelona
Inmaculada Concepción	Valls	Tarragona	Tarragona	Barcelona
Valleuse	Valls	Tarragona	Tarragona	Barcelona
Vendrell	El Vendrell	Tarragona	Tarragona	Barcelona
Escuelas Pías de Albarracín	Albarracín	Teruel	Teruel	Zaragoza

Escuelas Pías de Alcañiz	Alcañiz	Teruel	Teruel	Zaragoza
Nuestra Señora de la Piedad	Quintanar de la Orden	Toledo	Toledo	Madrid
Colegio de Nuestra Señora del Prado	Talavera de la Reina	Toledo	Toledo	Madrid
Nuestra Señora del Carmen	Toledo	Toledo	Toledo	Madrid
Nuestra Señora del Consuelo	Toledo	Toledo	Toledo	Madrid
Nuestra Señora del Sagrario	Toledo	Toledo	Toledo	Madrid
Escuelas Pías de Alzira	Alzira	Valencia	Valencia	Valencia
San Luis Gonzaga	Carcaixent	Valencia	Valencia	Valencia
San Luis Gonzaga	Cullera	Valencia	Valencia	Valencia
San Fernando	Enguera	Valencia	Valencia	Valencia
Escuelas Pías de Gandía	Gandia	Valencia	Valencia	Valencia
Setabense	Xàtiva	Valencia	Valencia	Valencia
Inmaculada Concepción	Ontinyent	Valencia	Valencia	Valencia
Colegio de Sueca	Sueca	Valencia	Valencia	Valencia
Escuelas Pías de Utiel	Utiel	Valencia	Valencia	Valencia
Angélico del Cid	Valencia	Valencia	Valencia	Valencia
Colegio de la Concepción	Valencia	Valencia	Valencia	Valencia
El Salvador	Valencia	Valencia	Valencia	Valencia
San José (jesuitas)	Valencia	Valencia	Valencia	Valencia
San Luis Vives	Valencia	Valencia	Valencia	Valencia
Academia de Cabanilles	Valencia	Valencia	Valencia	Valencia
Valentino	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
San Antolín	Medina del Campo	Valladolid	Valladolid	Valladolid
Isabel la Católica	Medina del Campo	Valladolid	Valladolid	Valladolid
Colegio de San Buenaventura	Medina de Rioseco	Valladolid	Valladolid	Valladolid
El Evangelista	Nava del Rey	Valladolid	Valladolid	Valladolid
La Unión	Peñafiel	Valladolid	Valladolid	Valladolid
Tordesillas	Tordesillas	Valladolid	Valladolid	Valladolid
Colegio de la Providencia	Valladolid	Valladolid	Valladolid	Valladolid

Colegio de San Luis	Valladolid	Valladolid	Valladolid	Valladolid
Colegio de San Pedro	Valladolid	Valladolid	Valladolid	Valladolid
San Ildefonso	Valladolid	Valladolid	Valladolid	Valladolid
San José (jesuitas)	Valladolid	Valladolid	Valladolid	Valladolid
Santo Tomás	Valladolid	Valladolid	Valladolid	Valladolid
San Isidro	Villalón de Campos	Valladolid	Valladolid	Valladolid
San Antonio de Padua	Bilbao	Vizcaya	Bilbao	Valladolid
Santo Tomás de Aquino	Bilbao	Vizcaya	Bilbao	Valladolid
Nuestra Señora de la Antigua	Orduña	Vizcaya	Bilbao	Valladolid
Virgen de la Vega	Benavente	Zamora	Zamora	Salamanca
(Sin nombre)	Fuentesaúco	Zamora	Zamora	Salamanca
Escuelas Pías de Toro	Toro	Zamora	Zamora	Salamanca
San José	Zamora	Zamora	Zamora	Salamanca
Nuestra Señora de la Peana	Ateca	Zaragoza	Zaragoza	Zaragoza
La Correa	Calatayud	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Daroca	Daroca	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Sos	Sos del Rey Católico	Zaragoza	Zaragoza	Zaragoza
Colegio de San Felipe	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San José	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Juan	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Miguel	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Ángel de las Escuelas	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Salvador	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio Politécnico	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Señores Altiñana	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Zaragoza	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Santa Ana	Ceuta	Ceuta	Jerez	Sevilla
D. Antonio Ruiz Murcia	Ceuta	Ceuta	Cádiz	Sevilla

D.2.5 Year 1900

Table D.6. Private schools in year 1900

Nombre	**Municipio**	**Provincia**	***Instituto***	**Distrito universitario**
Santa María de Vitoria	Vitoria-Gasteiz	Álava	Vitoria	Valladolid
Sagrado Corazón de Jesús	Zuia	Álava	Vitoria	Valladolid
Nuestra Señora de Cortes	Alcaraz	Albacete	Albacete	Valencia
Salvador	Hellín	Albacete	Albacete	Valencia
San José	Hellín	Albacete	Albacete	Valencia
Politécnico	La Roda	Albacete	Albacete	Valencia
Cervantes	Villarrobledo	Albacete	Albacete	Valencia
Nuestra Señora del Sagrado Corazón	Alcoy	Alicante	Alicante	Valencia
San José	Alicante	Alicante	Alicante	Valencia
San Luis Gonzaga	Alicante	Alicante	Alicante	Valencia
Nuestra Señora de los Remedios	Callosa d'en Sarrià	Alicante	Alicante	Valencia
Inmaculada Concepción	Novelda	Alicante	Alicante	Valencia
Nuestra Señora de la Asunción	Elche	Alicante	Alicante	Valencia
Inmaculada Concepción	Torrevieja	Alicante	Alicante	Valencia
Nuestra Señora del Buen Consejo	Novelda	Alicante	Alicante	Valencia
Santo Domingo (jesuitas)	Orihuela	Alicante	Alicante	Valencia
Santa Teresa de Jesús	Pego	Alicante	Alicante	Valencia
Santo Tomás	Villajoyosa	Alicante	Alicante	Valencia
Nuestra Señora de las Virtudes	Villena	Alicante	Alicante	Valencia
San Fernando	Villena	Alicante	Alicante	Valencia
Nuestra Señora de los Desamparados	Albox	Almería	Almería	Granada
Jesús	Almería	Almería	Almería	Granada
La Inmaculada	Almería	Almería	Almería	Granada
Nuestra Señora de Gádor	Berja	Almería	Almería	Granada
San José	Canjáyar	Almería	Almería	Granada
Nuestra Señora del Carmen	Cuevas del Almanzora	Almería	Almería	Granada
Purísima Concepción	Huércal-Overa	Almería	Almería	Granada
El Espíritu Santo	Níjar	Almería	Almería	Granada
Santiago	Terque	Almería	Almería	Granada

Nuestra Señora del Carmen	Vélez-Rubio	Almería	Almería	Granada
Santo Tomás de Aquino	Vera	Almería	Almería	Granada
San Juan de la Cruz	Arévalo	Ávila	Ávila	Salamanca
Nuestra Señora de la Piedad	Almendralejo	Badajoz	Badajoz	Sevilla
San Luis	Azuaga	Badajoz	Badajoz	Sevilla
Colegio de Santo Domingo	Badajoz	Badajoz	Badajoz	Sevilla
El Carmen	Badajoz	Badajoz	Badajoz	Sevilla
San Luis Gonzaga	Badajoz	Badajoz	Badajoz	Sevilla
Academia cívico-militar	Badajoz	Badajoz	Badajoz	Sevilla
Ateneo Pacense	Badajoz	Badajoz	Badajoz	Sevilla
Colegio de Cervantes	Badajoz	Badajoz	Badajoz	Sevilla
Colegio Politécnico	Badajoz	Badajoz	Badajoz	Sevilla
Santo Tomás de Aquino	Castuera	Badajoz	Badajoz	Sevilla
Inmaculado Corazón de María	Don Benito	Badajoz	Badajoz	Sevilla
Colegio en Don Benito	Don Benito	Badajoz	Badajoz	Sevilla
Hispano Lusitano	Don Benito	Badajoz	Badajoz	Sevilla
Nuestra Señora de la Salud	Fregenal de la Sierra	Badajoz	Badajoz	Sevilla
Nuestra Señora de la Hermosa	Fuente de Cantos	Badajoz	Badajoz	Sevilla
Colegio en Jerez de los Caballeros	Jerez de los Caballeros	Badajoz	Badajoz	Sevilla
Santa Ana	Mérida	Badajoz	Badajoz	Sevilla
Colegio en Mérida	Mérida	Badajoz	Badajoz	Sevilla
Colegio en Olivenza	Olivenza	Badajoz	Badajoz	Sevilla
San Francisco de Sales	Segura de León	Badajoz	Badajoz	Sevilla
San José	Villafranca de los Barros	Badajoz	Badajoz	Sevilla
San Benito	Villanueva de la Serena	Badajoz	Badajoz	Sevilla
La Purísima Concepción	Zafra	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
Colegio en Zafra	Zafra	Badajoz	Badajoz	Sevilla
Santo Tomás de Aquino	Ciutadella de Menorca	Baleares	Mahón	Barcelona
Colegio de Ibiza	Ibiza	Baleares	Palma	Barcelona
Santo Tomás de Aquino	Inca	Baleares	Palma	Barcelona

Colegio de Manacor	Manacor	Baleares	Palma	Barcelona
Santa Teresa	Marratxí	Baleares	Palma	Barcelona
Del Divino Corazón	Palma	Baleares	Palma	Barcelona
Dulcísimo Nombre de Jesús	Palma	Baleares	Palma	Barcelona
Escuelas Pías de Palma	Palma	Baleares	Palma	Barcelona
San José	Badalona	Barcelona	Barcelona	Barcelona
Solá y Seriol	Badalona	Barcelona	Barcelona	Barcelona
Ángel de la Guarda	Barcelona	Barcelona	Barcelona	Barcelona
Jesús	Barcelona	Barcelona	Barcelona	Barcelona
Jesús, María y José	Barcelona	Barcelona	Barcelona	Barcelona
Modelo de San José	Barcelona	Barcelona	Barcelona	Barcelona
Sagrado Corazón de Jesús	Barcelona	Barcelona	Barcelona	Barcelona
San Agustín	Barcelona	Barcelona	Barcelona	Barcelona
San Andrés	Barcelona	Barcelona	Barcelona	Barcelona
San Antonio Abad	Barcelona	Barcelona	Barcelona	Barcelona
San Antonio de Padua	Barcelona	Barcelona	Barcelona	Barcelona
San Cayetano	Barcelona	Barcelona	Barcelona	Barcelona
San Ignacio	Barcelona	Barcelona	Barcelona	Barcelona
San Ildefonso	Barcelona	Barcelona	Barcelona	Barcelona
San Isidoro	Barcelona	Barcelona	Barcelona	Barcelona
San Isidro Labrador	Barcelona	Barcelona	Barcelona	Barcelona
San José de Calasanz	Barcelona	Barcelona	Barcelona	Barcelona
San Juan Berchamans	Barcelona	Barcelona	Barcelona	Barcelona
San Justo	Barcelona	Barcelona	Barcelona	Barcelona
San Luis	Barcelona	Barcelona	Barcelona	Barcelona
San Miguel	Barcelona	Barcelona	Barcelona	Barcelona
San Vicente de Paul	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás (D. José Martí)	Barcelona	Barcelona	Barcelona	Barcelona
Santo Tomás de Aquino	Barcelona	Barcelona	Barcelona	Barcelona
Catalina	Barcelona	Barcelona	Barcelona	Barcelona
Centro de instrucción	Barcelona	Barcelona	Barcelona	Barcelona

Cervantes	Barcelona	Barcelona	Barcelona	Barcelona
Cisneros	Barcelona	Barcelona	Barcelona	Barcelona
D. Antonio Martínez	Barcelona	Barcelona	Barcelona	Barcelona
D. Cándido Antiga	Barcelona	Barcelona	Barcelona	Barcelona
D. Claudio Mimó	Barcelona	Barcelona	Barcelona	Barcelona
D. Francisco Ferrer	Barcelona	Barcelona	Barcelona	Barcelona
D. Gonzalo Cortada	Barcelona	Barcelona	Barcelona	Barcelona
D. Guillermo L. Galavotti	Barcelona	Barcelona	Barcelona	Barcelona
D. José Aldavert	Barcelona	Barcelona	Barcelona	Barcelona
D. Luis Cardona	Barcelona	Barcelona	Barcelona	Barcelona
D. Ramón Arquez	Barcelona	Barcelona	Barcelona	Barcelona
Español	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico	Barcelona	Barcelona	Barcelona	Barcelona
Ibérico (Sr. Nuri)	Barcelona	Barcelona	Barcelona	Barcelona
Liceo Infantil	Barcelona	Barcelona	Barcelona	Barcelona
Liceo Políglota	Barcelona	Barcelona	Barcelona	Barcelona
Peninsular	Barcelona	Barcelona	Barcelona	Barcelona
Piferrer	Barcelona	Barcelona	Barcelona	Barcelona
Políglota Mercantil	Barcelona	Barcelona	Barcelona	Barcelona
Vilar	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Barcelona	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Sarriá	Barcelona	Barcelona	Barcelona	Barcelona
Escuelas Pías de Calella	Calella	Barcelona	Barcelona	Barcelona
Escuelas Pías de Igualada	Igualada	Barcelona	Barcelona	Barcelona
Balmes	El Masnou	Barcelona	Barcelona	Barcelona
Valdemia	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Mataró	Mataró	Barcelona	Barcelona	Barcelona
Escuelas Pías de Sabadell	Sabadell	Barcelona	Barcelona	Barcelona
San Juan Cadevall	Terrassa	Barcelona	Barcelona	Barcelona
Tarrasense	Terrassa	Barcelona	Barcelona	Barcelona
San José	Vic	Barcelona	Barcelona	Barcelona

Colegio privado	Vic	Barcelona	Barcelona	Barcelona
San Raimundo Peñafort, Padres de la Sagrada Familia	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
D. Antonio Trullás	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
D. Pablo Tort	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
J. Vives	Vilafranca del Penedès	Barcelona	Barcelona	Barcelona
Escuelas Pías de Villanueva y la Geltrú	Vilanova i la Geltrú	Barcelona	Barcelona	Barcelona
San Nicolás de Bari	Briviesca	Burgos	Burgos	Valladolid
D. Enrique España	Briviesca	Burgos	Burgos	Valladolid
San Gil	Burgos	Burgos	Burgos	Valladolid
San José	Burgos	Burgos	Burgos	Valladolid
D. Gregorio del Castillo	Burgos	Burgos	Burgos	Valladolid
San Antonio	Medina de Pomar	Burgos	Burgos	Valladolid
Sagrados corazones de Jesús y María	Miranda de Ebro	Burgos	Burgos	Valladolid
San Jorge	Cáceres	Cáceres	Cáceres	Salamanca
Purísima Concepción	Plasencia	Cáceres	Cáceres	Salamanca
San Francisco	Plasencia	Cáceres	Cáceres	Salamanca
Preparatorio militar y de segunda enseñanza	Trujillo	Cáceres	Cáceres	Salamanca
Nuestra Señora de la Armenta	Algeciras	Cádiz	n.d.	Sevilla
Nuestra Señora de la Palma	Algeciras	Cádiz	Cádiz	Sevilla
Nuestra Señora de la Asunción	Arcos de la Frontera	Cádiz	Jerez	Sevilla
San Agustín	Cádiz	Cádiz	Cádiz	Sevilla
San Alberto	Cádiz	Cádiz	Cádiz	Sevilla
San Bernardo	Cádiz	Cádiz	Cádiz	Sevilla
San Buenaventura	Cádiz	Cádiz	Cádiz	Sevilla
San Clemente	Cádiz	Cádiz	Cádiz	Sevilla
San Felipe Neri	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco de Paula	Cádiz	Cádiz	Cádiz	Sevilla
San Nicolás de Tolentino	Cádiz	Cádiz	Cádiz	Sevilla
San Rafael	Cádiz	Cádiz	Cádiz	Sevilla
Institución gaditana de enseñanza	Cádiz	Cádiz	Cádiz	Sevilla
San Francisco Javier	Chiclana de la Frontera	Cádiz	Cádiz	Sevilla

San Rafael	Chiclana de la Frontera	Cádiz	Cádiz	Sevilla
La Purísima Concepción	Jerez de la Frontera	Cádiz	Jerez	Sevilla
Sagrado Corazón de Jesús	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San José	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San Juan Baustista	Jerez de la Frontera	Cádiz	Jerez	Sevilla
San Rafael	Jerez de la Frontera	Cádiz	Jerez	Sevilla
Santo Tomás de Aquino	Jerez de la Frontera	Cádiz	Jerez	Sevilla
Nuestra Señora del Carmen	Medina Sidonia	Cádiz	Jerez	Sevilla
San Luis Gonzaga (jesuitas)	El Puerto de Santa María	Cádiz	Jerez	Sevilla
D. Tirso Sánchez Cisneros	El Puerto de Santa María	Cádiz	Cádiz	Sevilla
Nuestra Señora del Carmen	San Fernando	Cádiz	Cádiz	Sevilla
Nuestra Señora del Rosario	San Fernando	Cádiz	Cádiz	Sevilla
Sagrado Corazón de Jesús	San Fernando	Cádiz	Cádiz	Sevilla
San Carlos Borromeo	San Fernando	Cádiz	na	Sevilla
San José	San Fernando	Cádiz	Cádiz	Sevilla
San Luis Gonzaga (antiguo)	San Fernando	Cádiz	Cádiz	Sevilla
D. Manuel de la Pascua	San Fernando	Cádiz	Cádiz	Sevilla
Don Juan Carbó	San Fernando	Cádiz	Jerez	Sevilla
Macías y Villena	San Fernando	Cádiz	Cádiz	Sevilla
San Francisco Javier	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Escuelas Pías de Sanlúcar de Barrameda	Sanlúcar de Barrameda	Cádiz	Jerez	Sevilla
Santo Tomás de Aquino	San Roque	Cádiz	Cádiz	Sevilla
San Luis Gonzaga	Tarifa	Cádiz	Jerez	Sevilla
San Rafael	Tarifa	Cádiz	Cádiz	Sevilla
Viciana	Burriana	Castellón	Castellón	Valencia
Escuelas Pías de Castellón	Castellón	Castellón	Castellón	Valencia
Segorbe	Segorbe	Castellón	Castellón	Valencia
San Isidoro	Alcázar de San Juan	Ciudad Real	Ciudad Real	Madrid
Nuestra Señora de la Consolación	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Balbuena	Valdepeñas	Ciudad Real	Ciudad Real	Madrid
Purísima Concepción	Cabra	Córdoba	Cabra	Sevilla

San José	Lucena	Córdoba	Cabra	Sevilla
Nuestra Señora de la Concepción y San José	Puente Genil	Córdoba	Cabra	Sevilla
Betanzos	Betanzos	Coruña	Coruña	Santiago
Colegio de Betanzos	Betanzos	Coruña	Santiago	Santiago
Católico	A Coruña	Coruña	Coruña	Santiago
Dequidt	A Coruña	Coruña	Coruña	Santiago
Católico	Ferrol	Coruña	Coruña	Santiago
Sagrado Corazón	Ferrol	Coruña	Coruña	Santiago
Santo Tomás de Aquino	Ferrol	Coruña	Coruña	Santiago
Colegio de El Ferrol	Ferrol	Coruña	Santiago	Santiago
Masquelet	Ferrol	Coruña	Coruña	Santiago
San Vicente Paúl	Noia	Coruña	Santiago	Santiago
Santo Tomás	Noia	Coruña	Santiago	Santiago
Inmaculada Concepción	Santiago de Compostela	Coruña	Santiago	Santiago
Nuestra Señora del Carmen	Santiago de Compostela	Coruña	Santiago	Santiago
San Luis Gonzaga	Santiago de Compostela	Coruña	Santiago	Santiago
Santo Tomás de Aquino	Santiago de Compostela	Coruña	Santiago	Santiago
Escuelas Pías de Almodóvar del Pinar	Almodóvar del Pinar	Cuenca	Cuenca	Valencia
Nuestra Señora de Rus	San Clemente	Cuenca	Cuenca	Valencia
San Luis Gonzaga	San Clemente	Cuenca	Cuenca	Valencia
La Magdalena	Sisante	Cuenca	Cuenca	Valencia
Nuestra Señora de Riansares	Tarancón	Cuenca	Cuenca	Valencia
Santiago Apóstol	Uclés	Cuenca	Cuenca	Valencia
Colegio de La Bisbal	La Bisbal d'Empordà	Gerona	Gerona	Barcelona
Santa María	Blanes	Gerona	Gerona	Barcelona
San Narciso	Gerona	Gerona	Gerona	Barcelona
D. Juan Carreras	Gerona	Gerona	Gerona	Barcelona
Colegio de Lloret de Mar	Lloret de Mar	Gerona	Gerona	Barcelona
Escuelas Pías de Olot	Olot	Gerona	Gerona	Barcelona
Escuelas Pías de Puigcerdà	Puigcerdà	Gerona	Gerona	Barcelona
Santa María de Ripoll	Ripoll	Gerona	Gerona	Barcelona

Colegio de Sant Feliu de Guíxols	Sant Feliu de Guíxols	Gerona	Gerona	Barcelona
Vidal	Sant Feliu de Guíxols	Gerona	Gerona	Barcelona
Escuelas Pías de El Torn	Sant Ferriol	Gerona	Gerona	Barcelona
Nuestra Señora de Farnés	Santa Coloma de Farners	Gerona	Gerona	Barcelona
La Purísima Concepción	Baza	Granada	Granada	Granada
El Patriarca San José	Granada	Granada	Granada	Granada
Jesús Nazareno	Granada	Granada	Granada	Granada
La Purísima Concepción	Granada	Granada	Granada	Granada
Nuestra Señora del Carmen	Granada	Granada	Granada	Granada
Sagrado Corazón de Jesús	Granada	Granada	Granada	Granada
San Bartolomé y Santiago	Granada	Granada	Granada	Granada
San Francisco	Granada	Granada	Granada	Granada
San Pablo	Granada	Granada	Granada	Granada
Academia cívico-militar	Granada	Granada	Granada	Granada
Escuelas Pías del Dulce Nombre de María	Granada	Granada	Granada	Granada
Politécnico	Motril	Granada	Granada	Granada
Cardenal Mendoza	Guadalajara	Guadalajara	Guadalajara	Madrid
Huérfanos de la guerra	Guadalajara	Guadalajara	Guadalajara	Madrid
Escuelas Pías de Molina de Aragón	Molina de Aragón	Guadalajara	Guadalajara	Madrid
Purísima Concepción	Sigüenza	Guadalajara	Guadalajara	Madrid
San Luis	Irun	Guipúzcoa	Guipúzcoa	Valladolid
Santa María (Hermanos Maristas)	San Sebastián	Guipúzcoa	Guipúzcoa	Valladolid
Toribio Pena	San Sebastián	Guipúzcoa	Guipúzcoa	Valladolid
Escuelas Pías de Tolosa	Tolosa	Guipúzcoa	Guipúzcoa	Valladolid
Real Seminario (Dominicos)	Bergara	Guipúzcoa	Guipúzcoa	Valladolid
San José	Moguer	Huelva	Huelva	Sevilla
Colón	Moguer	Huelva	Huelva	Sevilla
Escuelas Pías de Barbastro	Barbastro	Huesca	Huesca	Zaragoza
Escuelas Pías de Fraga	Fraga	Huesca	Huesca	Zaragoza
Escuelas Pías de Jaca	Jaca	Huesca	Huesca	Zaragoza
Escuelas Pías de Peralta de Calasanz	Peralta de Calasanz	Huesca	Huesca	Zaragoza

Escuelas Pías de Tamarite	Tamarite de Litera	Huesca	Huesca	Zaragoza
San José	Alcalá la Real	Jaén	Jaén	Granada
Colegio privado de Baeza	Baeza	Jaén	Jaén	Granada
La Inmaculada Concepción	La Carolina	Jaén	Jaén	Granada
Colegio privado de la Carolina	La Carolina	Jaén	Jaén	Granada
San Agustín	Jaén	Jaén	Jaén	Granada
San José	Jaén	Jaén	Jaén	Granada
Santo Tomás	Jaén	Jaén	Jaén	Granada
Sagrado Corazón de Jesús	Linares	Jaén	Jaén	Granada
Escuelas Pías de Úbeda	Úbeda	Jaén	Jaén	Granada
Colegio privado de Villacarrillo	Villacarrillo	Jaén	Jaén	Granada
Colegio privado de Villanueva del Arzobispo	Villanueva del Arzobispo	Jaén	Jaén	Granada
De San Vicente Ferrer	Astorga	León	León	Oviedo
La Bañeza	La Bañeza	León	León	Oviedo
El Legionense	León	León	León	Oviedo
Ponferrada	Ponferrada	León	León	Oviedo
San José	Valderas	León	León	Oviedo
De San José (Agustinos)	Valencia de Don Juan	León	León	Oviedo
De la Purísima Concepción	Villafranca del Bierzo	León	León	Oviedo
San Luis Gonzaga	Villafranca del Bierzo	León	León	Oviedo
Escuelas Pías de Balaguer	Balaguer	Lérida	Lérida	Barcelona
Borges	Les Borges Blanques	Lérida	Lérida	Barcelona
Cervera	Cervera	Lérida	Lérida	Barcelona
Oliana	Oliana	Lérida	Lérida	Barcelona
Escuelas Pías de Tárrega	Tàrrega	Lérida	Lérida	Barcelona
Colegio privado de Alfaro	Alfaro	Logroño	Logroño	Zaragoza
San Agustín	Calahorra	Logroño	Logroño	Zaragoza
Colegio privado de Haro	Haro	Logroño	Logroño	Zaragoza
Nuestra Señora de Valvanera	Logroño	Logroño	Logroño	Zaragoza
Colegio privado de Logroño	Logroño	Logroño	Logroño	Zaragoza
Colegio privado de Rasillo de Cameros	Rasillo de Cameros	Logroño	Logroño	Zaragoza

Escuelas Pías de Monforte	Monforte de Lemos	Lugo	Lugo	Santiago
San Luis	Ribadeo	Lugo	Lugo	Santiago
San Luis Gonzaga	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
Complutense	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Ildefonso	Alcalá de Henares	Madrid	Madrid-Noviciado	Madrid
El Salvador	Aranjuez	Madrid	Madrid-Noviciado	Madrid
Alfonso XIII	Aranjuez	Madrid	Madrid-San Isidro	Madrid
San Juan Bautista	Arganda del Rey	Madrid	Madrid-San Isidro	Madrid
La Concepción	Colmenar Viejo	Madrid	Madrid-Noviciado	Madrid
Alfonso XIII	El Escorial	Madrid	Madrid-San Isidro	Madrid
Real Colegio del Escorial	El Escorial	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de Getafe	Getafe	Madrid	Madrid-San Isidro	Madrid
Nuestra Señora del Carmen	Leganés	Madrid	Madrid-Noviciado	Madrid
Asociación de Católicos	Madrid	Madrid	n.d.	Madrid
Corazón de Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
de la Cruz	Madrid	Madrid	Madrid-San Isidro	Madrid
de la Inmaculada Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
de la Purísima Concepción	Madrid	Madrid	Madrid-San Isidro	Madrid
de San Ignacio	Madrid	Madrid	Madrid-Noviciado	Madrid
de San Luis	Madrid	Madrid	n.d.	Madrid
del Salvador	Madrid	Madrid	Madrid-Noviciado	Madrid
Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
Niñas huérfanas de la Concepción	Madrid	Madrid	n.d.	Madrid
Niño Jesús	Madrid	Madrid	Madrid-Noviciado	Madrid
Nuestra Señora de las Nieves	Madrid	Madrid	Madrid-Noviciado	Madrid
Nuestra Señora del Buen Consejo	Madrid	Madrid	Madrid-San Isidro	Madrid
Nuestra Señora del Pilar	Madrid	Madrid	Madrid-Noviciado	Madrid
Nuestra Señora del Recuerdo	Madrid	Madrid	Madrid-San Isidro	Madrid
Purísima Concepción	Madrid	Madrid	Madrid-Noviciado	Madrid
Real Escuela Teresiana	Madrid	Madrid	Madrid-San Isidro	Madrid

Sagrado Corazón	Madrid	Madrid	Madrid-Noviciado	Madrid
Sagrado Corazón	Madrid	Madrid	Madrid-San Isidro	Madrid
San Agustín	Madrid	Madrid	Madrid-Noviciado	Madrid
San Andrés	Madrid	Madrid	Madrid-San Isidro	Madrid
San Antonio	Madrid	Madrid	Madrid-San Isidro	Madrid
San Antonio de Padua	Madrid	Madrid	Madrid-San Isidro	Madrid
San Carlos	Madrid	Madrid	Madrid-Noviciado	Madrid
San Casiano	Madrid	Madrid	Madrid-Noviciado	Madrid
San Diego	Madrid	Madrid	Madrid-San Isidro	Madrid
San Estanislao	Madrid	Madrid	Madrid-Noviciado	Madrid
San Fermín	Madrid	Madrid	Madrid-Noviciado	Madrid
San Francisco de Asís	Madrid	Madrid	Madrid-San Isidro	Madrid
San Gregorio	Madrid	Madrid	Madrid-Noviciado	Madrid
San Ildefonso	Madrid	Madrid	Madrid-Noviciado	Madrid
San Isidoro	Madrid	Madrid	Madrid-San Isidro	Madrid
San Isidro	Madrid	Madrid	Madrid-Noviciado	Madrid
San Jerónimo	Madrid	Madrid	Madrid-Noviciado	Madrid
San Joaquín	Madrid	Madrid	Madrid-Noviciado	Madrid
San José	Madrid	Madrid	Madrid-San Isidro	Madrid
San José	Madrid	Madrid	Madrid-Noviciado	Madrid
San José de Calasanz	Madrid	Madrid	Madrid-Noviciado	Madrid
San Juan Bautista	Madrid	Madrid	Madrid-Noviciado	Madrid
San Laureano	Madrid	Madrid	Madrid-Noviciado	Madrid
San Leandro	Madrid	Madrid	Madrid-Noviciado	Madrid
San Lucas Evangelista	Madrid	Madrid	Madrid-Noviciado	Madrid
San Luis Gonzaga	Madrid	Madrid	Madrid-San Isidro	Madrid
San Luis y San Estanislao	Madrid	Madrid	Madrid-Noviciado	Madrid
San Marcos	Madrid	Madrid	Madrid-San Isidro	Madrid
San Mauricio	Madrid	Madrid	Madrid-Noviciado	Madrid
San Miguel	Madrid	Madrid	Madrid-Noviciado	Madrid
San Miguel	Madrid	Madrid	Madrid-San Isidro	Madrid

San Millán	Madrid	Madrid	Madrid-San Isidro	Madrid
San Pablo	Madrid	Madrid	Madrid-Noviciado	Madrid
San Pedro	Madrid	Madrid	Madrid-Noviciado	Madrid
San Pío V	Madrid	Madrid	Madrid-Noviciado	Madrid
San Rafael	Madrid	Madrid	Madrid-San Isidro	Madrid
San Rafael y Santa Elena	Madrid	Madrid	Madrid-Noviciado	Madrid
San Sebastián	Madrid	Madrid	Madrid-Noviciado	Madrid
Santa Isabel	Madrid	Madrid	n.d.	Madrid
Santo Ángel	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Ángel de la Guarda	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Domingo de Guzmán	Madrid	Madrid	Madrid-Noviciado	Madrid
Santo Tomás	Madrid	Madrid	Madrid-Noviciado	Madrid
Teresiano	Madrid	Madrid	Madrid-San Isidro	Madrid
Academia	Madrid	Madrid	n.d.	Madrid
Academia de Palet	Madrid	Madrid	n.d.	Madrid
Aristotélico	Madrid	Madrid	Madrid-Noviciado	Madrid
Aroca	Madrid	Madrid	Madrid-San Isidro	Madrid
Ateniense	Madrid	Madrid	Madrid-Noviciado	Madrid
Cabero	Madrid	Madrid	Madrid-Noviciado	Madrid
Calderón de la Barca	Madrid	Madrid	Madrid-Noviciado	Madrid
Cardenal Cisneros	Madrid	Madrid	Madrid-San Isidro	Madrid
Carpetano	Madrid	Madrid	Madrid-Noviciado	Madrid
Certamen	Madrid	Madrid	Madrid-Noviciado	Madrid
Cicerón	Madrid	Madrid	Madrid-San Isidro	Madrid
Clásico Español	Madrid	Madrid	Madrid-Noviciado	Madrid
Colegio-Asamblea del distrito del Hospital	Madrid	Madrid	n.d.	Madrid
de Carabanchel	Madrid	Madrid	n.d.	Madrid
de D. Fermín Martínez	Madrid	Madrid	n.d.	Madrid
de Gómez Paredes	Madrid	Madrid	n.d.	Madrid
de la Providencia	Madrid	Madrid	n.d.	Madrid
del Ángel	Madrid	Madrid	n.d.	Madrid

Escribano	Madrid	Madrid	Madrid-San Isidro	Madrid
Escuela Politécnica	Madrid	Madrid	Madrid-San Isidro	Madrid
Español	Madrid	Madrid	Madrid-San Isidro	Madrid
Español Francés	Madrid	Madrid	Madrid-San Isidro	Madrid
Fernando el Santo	Madrid	Madrid	Madrid-San Isidro	Madrid
Fernando III el Santo	Madrid	Madrid	Madrid-San Isidro	Madrid
Figueroa	Madrid	Madrid	Madrid-San Isidro	Madrid
Fray Luis de Granada	Madrid	Madrid	Madrid-Noviciado	Madrid
Garcilaso de la Vega	Madrid	Madrid	Madrid-Noviciado	Madrid
Hispano Francés	Madrid	Madrid	Madrid-San Isidro	Madrid
Hispano Romano	Madrid	Madrid	Madrid-Noviciado	Madrid
Hispano-Americano	Madrid	Madrid	Madrid-Noviciado	Madrid
Ibérico	Madrid	Madrid	Madrid-San Isidro	Madrid
Ibérico	Madrid	Madrid	Madrid-Noviciado	Madrid
Jovellanos	Madrid	Madrid	Madrid-Noviciado	Madrid
Latino-Español	Madrid	Madrid	Madrid-San Isidro	Madrid
León XIII	Madrid	Madrid	Madrid-Noviciado	Madrid
Liceo Americano de Santa Isabel	Madrid	Madrid	n.d.	Madrid
Loreto	Madrid	Madrid	n.d.	Madrid
Los Ángeles	Madrid	Madrid	Madrid-Noviciado	Madrid
Madrileño	Madrid	Madrid	n.d.	Madrid
Martínez de la Rosa	Madrid	Madrid	Madrid-Noviciado	Madrid
Matritense	Madrid	Madrid	Madrid-Noviciado	Madrid
Niñas de Leganés	Madrid	Madrid	n.d.	Madrid
Pogonoski	Madrid	Madrid	n.d.	Madrid
Pontes	Madrid	Madrid	n.d.	Madrid
Pontes	Madrid	Madrid	Madrid-Noviciado	Madrid
Romano	Madrid	Madrid	Madrid-San Isidro	Madrid
Virseda	Madrid	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Antonio Abad	Madrid	Madrid	Madrid-Noviciado	Madrid
Escuelas Pías de San Fernando	Madrid	Madrid	Madrid-San Isidro	Madrid

Navalcarnero	Navalcarnero	Madrid	Madrid-San Isidro	Madrid
Nuestra Señora de los Remedios	Antequera	Málaga	Málaga	Granada
San Luis Gonzaga	Antequera	Málaga	Málaga	Granada
Escuelas Pías de Archidona	Archidona	Málaga	Málaga	Granada
Nuestra Señora de las Angustias	Campillos	Málaga	Málaga	Granada
San Estanislao (jesuitas)	Málaga	Málaga	Málaga	Granada
San Jorge	Málaga	Málaga	Málaga	Granada
San Rafael	Málaga	Málaga	Málaga	Granada
Santos Arcángeles	Málaga	Málaga	Málaga	Granada
Academia Nacional	Málaga	Málaga	Málaga	Granada
Academia Politécnica	Málaga	Málaga	Málaga	Granada
Angélico Doitan	Málaga	Málaga	Málaga	Granada
del Ángel	Málaga	Málaga	Málaga	Granada
Español	Málaga	Málaga	Málaga	Granada
San Cayetano	Ronda	Málaga	Málaga	Granada
San Rafael	Vélez-Málaga	Málaga	Málaga	Granada
San José	Águilas	Murcia	Murcia	Valencia
San José	Águilas	Murcia	Murcia	Valencia
El Salvador	Caravaca de la Cruz	Murcia	Murcia	Valencia
Cuatro Santos	Cartagena	Murcia	Murcia	Valencia
San Fulgencio	Cartagena	Murcia	Murcia	Valencia
San Isidoro	Cartagena	Murcia	Murcia	Valencia
San Luis	Cartagena	Murcia	Murcia	Valencia
Academia de Izquierdo	Cartagena	Murcia	Murcia	Valencia
Colegio de la Purísima Concepción	Cieza	Murcia	Murcia	Valencia
San Antonio	Jumilla	Murcia	Murcia	Valencia
Jumillano	Jumilla	Murcia	Murcia	Valencia
Purísima Concepción	Lorca	Murcia	Murcia	Valencia
San José	Mazarrón	Murcia	Murcia	Valencia
El Niño Jesús de Belén	Mula	Murcia	Murcia	Valencia
Colegio de los Sagrados Corazones	Murcia	Murcia	Murcia	Valencia

Santa Eulalia	Totana	Murcia	Murcia	Valencia
Nuestra Señora del Rosario	La Unión	Murcia	Murcia	Valencia
Purísima Concepción	La Unión	Murcia	Murcia	Valencia
Escuelas Pías de Yecla	Yecla	Murcia	Murcia	Valencia
Seráfico Capuchino	Baztan	Navarra	Pamplona	Zaragoza
Escuelas Pías de Tafalla	Tafalla	Navarra	Pamplona	Zaragoza
Escuelas Pías de Celanova	Celanova	Orense	Orense	Santiago
Nuestra Señora del Carmen	A Pobra de Trives	Orense	Orense	Santiago
Ribadavia	Ribadavia	Orense	Orense	Santiago
De la Merced	Avilés	Oviedo	Oviedo	Oviedo
De Nuestra Señora de Covadonga	Cangas de Onís	Oviedo	Oviedo	Oviedo
San Dionisio	Cudillero	Oviedo	Oviedo	Oviedo
Inmaculada Concepción	Gijón	Oviedo	Gijón	Oviedo
San José	Grado	Oviedo	Oviedo	Oviedo
La Concepción	Valdés	Oviedo	Oviedo	Oviedo
Cangas de Tineo	Valdés	Oviedo	Oviedo	Oviedo
De la Encarnación	Llanes	Oviedo	Oviedo	Oviedo
Santo Tomás de Aquino	Piloña	Oviedo	Oviedo	Oviedo
San Luis Gonzaga	Pravia	Oviedo	Oviedo	Oviedo
San Francisco	Tineo	Oviedo	Oviedo	Oviedo
De la Inmaculada Concepción	Villaviciosa	Oviedo	Oviedo	Oviedo
San José	Villaviciosa	Oviedo	Oviedo	Oviedo
San Luis Gonzaga	Villaviciosa	Oviedo	Oviedo	Oviedo
Sagrado Corazón de Jesús (jesuitas)	Carrión de los Condes	Palencia	Palencia	Valladolid
Ángel Custodio	Villada	Palencia	Palencia	Valladolid
Arrecife	Arrecife	Canarias	Canarias	Sevilla
Nuestra Señora de la Soledad	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
San Agustín	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
Las Palmas	Las Palmas de Gran Canaria	Canarias	Canarias	Sevilla
Politécnico	A Estrada	Pontevedra	Pontevedra	Santiago
Apóstol Santiago (jesuitas)	A Guarda	Pontevedra	Pontevedra	Santiago

San Antonio	Lalín	Pontevedra	Santiago	Santiago
San Luis Gonzaga	Pontevedra	Pontevedra	Pontevedra	Santiago
María Auxiliadora	Vigo	Pontevedra	Pontevedra	Santiago
Santo Tomás de Aquino	Vigo	Pontevedra	Pontevedra	Santiago
Centro Mercantil	Vigo	Pontevedra	Pontevedra	Santiago
San Agustín	Vilagarcía de Arousa	Pontevedra	Pontevedra	Santiago
Virgen del Rosario	Cerdedo-Cotobade	Pontevedra	Pontevedra	Santiago
Colegio Salesiano	Béjar	Salamanca	Salamanca	Salamanca
Colegio de Béjar	Béjar	Salamanca	Salamanca	Salamanca
San Cayetano	Ciudad Rodrigo	Salamanca	Salamanca	Salamanca
San Miguel	Peñaranda de Bracamonte	Salamanca	Salamanca	Salamanca
San Ignacio de Loyola	Salamanca	Salamanca	Salamanca	Salamanca
Ateneo Salmantino	Salamanca	Salamanca	Salamanca	Salamanca
Nuestra Señora del Socorro	Vitigudino	Salamanca	Salamanca	Salamanca
Tooro	La Orotava	Canarias	Canarias	Sevilla
Santa Cruz de la Palma	Santa Cruz de la Palma	Canarias	Canarias	Sevilla
Santa Cruz de Tenerife	Santa Cruz de Tenerife	Canarias	Canarias	Sevilla
San Vicente de Paúl	Limpias	Santander	Santander	Valladolid
San Sebastián de Reinosa	Reinosa	Santander	Santander	Valladolid
Cántabro	Santander	Santander	Santander	Valladolid
San Juan Bautista de Santoña	Santoña	Santander	Santander	Valladolid
San José	Torrelavega	Santander	Santander	Valladolid
Escuelas Pías de Villacarriedo	Villacarriedo	Santander	Santander	Valladolid
Santa María Magdalena	Cuéllar	Segovia	Segovia	Madrid
Nuestra Señora de Gracia	Carmona	Sevilla	Sevilla	Sevilla
San Rafael	Cazalla de la Sierra	Sevilla	Sevilla	Sevilla
Nuestra Señora del Robledo	Constantina	Sevilla	Sevilla	Sevilla
San Fulgencio	Écija	Sevilla	Sevilla	Sevilla
San Isidoro	Marchena	Sevilla	Sevilla	Sevilla
San Miguel	Morón de la Frontera	Sevilla	Sevilla	Sevilla
La Purísima Concepción	Osuna	Sevilla	Sevilla	Sevilla

Colegio privado de Osuna	Osuna	Sevilla	Osuna	Sevilla
Espíritu Santo	Sevilla	Sevilla	Sevilla	Sevilla
Inmaculado Corazón de María	Sevilla	Sevilla	Sevilla	Sevilla
Jesús, María y José	Sevilla	Sevilla	Sevilla	Sevilla
San Antonio de Padua	Sevilla	Sevilla	Sevilla	Sevilla
San Diego	Sevilla	Sevilla	Sevilla	Sevilla
San Fernando	Sevilla	Sevilla	Sevilla	Sevilla
San Francisco de Paula	Sevilla	Sevilla	Sevilla	Sevilla
San Hermenegildo	Sevilla	Sevilla	Sevilla	Sevilla
San Isidro	Sevilla	Sevilla	Sevilla	Sevilla
San Leandro	Sevilla	Sevilla	Sevilla	Sevilla
San Lorenzo	Sevilla	Sevilla	Sevilla	Sevilla
San Luis Gonzaga	Sevilla	Sevilla	Sevilla	Sevilla
San Pedro	Sevilla	Sevilla	Sevilla	Sevilla
San Pelagio	Sevilla	Sevilla	Sevilla	Sevilla
San Ramón	Sevilla	Sevilla	Sevilla	Sevilla
San Román	Sevilla	Sevilla	Sevilla	Sevilla
Santa Bárbara	Sevilla	Sevilla	Sevilla	Sevilla
Santo Ángel de la Guarda	Sevilla	Sevilla	Sevilla	Sevilla
Academia Politécnica	Sevilla	Sevilla	Sevilla	Sevilla
Calasancio Hispalense	Sevilla	Sevilla	Sevilla	Sevilla
Nuestra Señora del Carmen (salesianos)	Utrera	Sevilla	Sevilla	Sevilla
San Luis Gonzaga	Utrera	Sevilla	Sevilla	Sevilla
Del Burgo de Osma	Burgo de Osma	Soria	Soria	Zaragoza
Colegio de San Luis	Montblanc	Tarragona	Tarragona	Barcelona
Nuestra Señora de la Merced	Montblanc	Tarragona	Tarragona	Barcelona
Colegio de Montblanc	Montblanc	Tarragona	Tarragona	Barcelona
Nuestra Señora de la Misericordia	Reus	Tarragona	Tarragona	Barcelona
Colegio Reusense	Reus	Tarragona	Tarragona	Barcelona
Colegio de D. Ignacio Gual	Tarragona	Tarragona	Tarragona	Barcelona
Colegio de Falset	Tarragona	Tarragona	Tarragona	Barcelona

Colegio de Tarragona	Tarragona	Tarragona	Tarragona	Barcelona
Colegio Tarraconense	Tarragona	Tarragona	Tarragona	Barcelona
San Luis	Tortosa	Tarragona	Tarragona	Barcelona
Colegio de Santo Tomás	Valls	Tarragona	Tarragona	Barcelona
Escuelas Pías de Valls	Valls	Tarragona	Tarragona	Barcelona
Escuelas Pías de Albarracín	Albarracín	Teruel	Teruel	Zaragoza
Escuelas Pías de Alcañiz	Alcañiz	Teruel	Teruel	Zaragoza
Padres Paúles	Alcorisa	Teruel	Teruel	Zaragoza
Nuestra Señora del Carmen	Mora	Toledo	Toledo	Madrid
Nuestra Señora de la Paz	La Puebla de Montalbán	Toledo	Toledo	Madrid
Corazón de Jesús	Quintanar de la Orden	Toledo	Toledo	Madrid
Nuestra Señora de la Piedad	Quintanar de la Orden	Toledo	Toledo	Madrid
Colegio de Nuestra Señora del Prado	Talavera de la Reina	Toledo	Toledo	Madrid
Nuestra Señora de la Piedad	Toledo	Toledo	Toledo	Madrid
Nuestra Señora del Consuelo	Toledo	Toledo	Toledo	Madrid
María Cristina	Toledo	Toledo	Toledo	Madrid
María Cristina	Toledo	Toledo	Toledo	Madrid
San Gil	Torrijos	Toledo	Toledo	Madrid
San Fernando	Yuncler	Toledo	Toledo	Madrid
Escuelas Pías de Alzira	Alzira	Valencia	Valencia	Valencia
San José	Carcaixent	Valencia	Valencia	Valencia
San Luis Gonzaga	Carcaixent	Valencia	Valencia	Valencia
Escuelas Pías de Gandía	Gandia	Valencia	Valencia	Valencia
Setabense	Xàtiva	Valencia	Valencia	Valencia
San Miguel	Llíria	Valencia	Valencia	Valencia
Inmaculada Concepción	Ontinyent	Valencia	Valencia	Valencia
Colegio de Sueca	Sueca	Valencia	Valencia	Valencia
Escuelas Pías de Utiel	Utiel	Valencia	Valencia	Valencia
Angélico del Cid	Valencia	Valencia	Valencia	Valencia
Colegio de la Concepción	Valencia	Valencia	Valencia	Valencia
San José (jesuitas)	Valencia	Valencia	Valencia	Valencia

San Luis Vives	Valencia	Valencia	Valencia	Valencia
Academia de Cabanilles	Valencia	Valencia	Valencia	Valencia
Academia de la Cruz	Valencia	Valencia	Valencia	Valencia
Cervantes	Valencia	Valencia	Valencia	Valencia
Valentino	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
Escuelas Pías de Valencia	Valencia	Valencia	Valencia	Valencia
San Antolín	Medina del Campo	Valladolid	Valladolid	Valladolid
Colegio de San Buenaventura	Medina de Rioseco	Valladolid	Valladolid	Valladolid
El Evangelista	Nava del Rey	Valladolid	Valladolid	Valladolid
La Unión	Peñafiel	Valladolid	Valladolid	Valladolid
Colegio de la Providencia	Valladolid	Valladolid	Valladolid	Valladolid
Colegio de San Luis	Valladolid	Valladolid	Valladolid	Valladolid
Colegio de San Pedro	Valladolid	Valladolid	Valladolid	Valladolid
San Fernando	Valladolid	Valladolid	Valladolid	Valladolid
San Ildefonso	Valladolid	Valladolid	Valladolid	Valladolid
San José (jesuitas)	Valladolid	Valladolid	Valladolid	Valladolid
Santiago	Valladolid	Valladolid	Valladolid	Valladolid
Santo Tomás	Valladolid	Valladolid	Valladolid	Valladolid
Liceo	Valladolid	Valladolid	Valladolid	Valladolid
San José	Villalón de Campos	Valladolid	Valladolid	Valladolid
San Luis	Bermeo	Vizcaya	Bilbao	Valladolid
San Antonio de Padua	Bilbao	Vizcaya	Bilbao	Valladolid
Academia de Ciencias y Artes	Bilbao	Vizcaya	Bilbao	Valladolid
Academia de Navegación	Bilbao	Vizcaya	Bilbao	Valladolid
Academia Politécnica	Bilbao	Vizcaya	Bilbao	Valladolid
Escuelas Pías de Bilbao	Bilbao	Vizcaya	Bilbao	Valladolid
San Bernardo	Getxo	Vizcaya	Bilbao	Valladolid
Nuestra Señora de la Consolación	Gernika-Lumo	Vizcaya	Bilbao	Valladolid
Nuestra Señora de la Antigua	Orduña	Vizcaya	Bilbao	Valladolid
Santo Tomás	Portugalete	Vizcaya	Bilbao	Valladolid

Virgen de la Vega	Benavente	Zamora	Zamora	Salamanca
Escuelas Pías de Toro	Toro	Zamora	Zamora	Salamanca
San Ildefonso	Zamora	Zamora	Zamora	Salamanca
La Correa	Calatayud	Zaragoza	Zaragoza	Zaragoza
Colegio de la Inmaculada Concepción	Caspe	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Daroca	Daroca	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Sos	Sos del Rey Católico	Zaragoza	Zaragoza	Zaragoza
Colegio de San Felipe	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San José	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Juan	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de San Miguel	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio de Santo Tomás de Aquino	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Ángel de las Escuelas	Zaragoza	Zaragoza	Zaragoza	Zaragoza
El Salvador	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Colegio Politécnico	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Señores Altiñana	Zaragoza	Zaragoza	Zaragoza	Zaragoza
Escuelas Pías de Zaragoza	Zaragoza	Zaragoza	Zaragoza	Zaragoza
San José e Institución de Enseñanza	Ceuta	Ceuta	Cádiz	Sevilla
D. Antonio Ruiz Murcia	Ceuta	Ceuta	Cádiz	Sevilla
Nuestra Señora de la Victoria	Melilla	Melilla	Málaga	Granada