

Does English Rule?

Language Instruction and Economic Strategies in Singapore, Ireland, and Puerto Rico

Sandra L. Suárez

The educational system is frequently presented as a key component of an economic strategy geared toward exports and the attraction of foreign capital. What is the impact of a country's distinctive patterns of dominant party consolidation, nation building, and interest group politics on the relationship between economic development strategies and language instruction policies? Despite similar economic strategies, Singapore, Ireland, and Puerto Rico have engaged in different processes of language curricular reform to meet human capital needs. In Singapore, English proficiency quickly became a useful tool to attract foreign capital as well as a medium of interethnic communication and a way to create a cohesive state apparatus dominated by one party. In Ireland, where English proficiency is seen as a factor in the attraction of foreign capital, the government's acceptance of English instruction was more incremental, largely because Gaelic was perceived by the dominant party as an essential tool in nation building. In Puerto Rico nationalist politics and the strength of the teachers' unions have thwarted attempts to promote English language education as a way to improve economic well-being. The outcome of these processes is a high degree of congruence between the economic strategy and language instruction policies in Singapore, a medium to high degree of congruence in Ireland, and a low degree in Puerto Rico.

Scholars have emphasized the importance of political and economic factors when explaining changes in language policies and repertoires. They have examined the political motivations of new nations and states and their elites and counterelites and highlighted the economic motivations for individual language choice.¹ Less attention has been devoted to the relationship between language education policies and economic strategies.² However, the conventional functionalist rationale would suggest that countries pursuing an economic strategy based on exports and the attraction of foreign capital should adapt their language education policies to the requirements of that economic strategy.

The importance of language instruction is underscored by the fact that proficiency in one or two languages (reading, writing, oral expression) is the principal goal of most primary and secondary school curriculums. Chiswick and Miller explain that language skills "satisfy the three criteria that define human capital." There are costs involved in the creation of language skills; they serve a productive purpose relevant

to economic activity in the labor market; and they are embodied in a person.³ An important aspect in the relationship between language instruction and economic strategies is whether curriculum policy should emphasize the local vernacular alone or a language spoken widely around the world as well, especially one used in scientific, technological, and business circles.⁴ English is widely recognized as the *lingua franca* in these domains, and companies are likely to take the English proficiency of the labor force, managerial cadres, and scientists and engineers into consideration when making investment decisions.⁵

Language Education and Economic Strategies

The literature on education and economic strategies contains two main streams. First, students of globalization have looked at its effects on governments' commitments to social welfare in general and educational change in particular.⁶ They argue that globalization induces governments to reduce the growth of public spending on education. The educational system, however, is also "under pressure to attract foreign capital, and this means providing a ready supply of skilled labor."⁷ Second, human capital and growth theorists argue that education was key to the success of export-oriented strategies in East Asia.⁸ They see education as both a prerequisite for a successful manufacturing export strategy and the functional outcome of the economic policy.⁹ They explain that the demand for skilled labor is greater in countries that pursue an export-oriented strategy as opposed to an inward-looking development strategy. The wage differentials between skilled and unskilled workers create a demand for education on the part of individuals and a need for governments to respond.¹⁰ Accordingly, Kuruvilla argues that the transition from the manufacturing of primary products to the manufacturing of higher value added products is characterized by a shift in government policy away from control over wages and labor to the development of a highly skilled labor force.¹¹ These findings imply that countries that have experienced growth under export-oriented industrialization are more likely to have tailored their educational policy to that economic strategy.

Language policy potentially has significant economic implications for countries that due to their small size are highly dependent on the global economy. Small states differ from larger ones in how they adapt to the international economy.¹² Their industrialization strategy tends to be predicated on the attraction of export-oriented foreign multinationals. Most commonly, they use tax policy and grants to lure foreign investors, but they have also attempted to make local labor available in the quantity, cost, and skills desired by them.¹³ Moreover, many small countries attempt to turn themselves into economic, trade, and financial hubs for their respective regions. In these cases an English-proficient population may become an even more important economic imperative.

The best evidence in support of the importance of English proficiency as a competitive tool for the economic success of small nations comes from the labor market. Studies of wage differentials show a significant earnings gap between English-proficient laborers and those who lack this skill. Among immigrants in English-speaking countries, those who are proficient in English have higher earnings than of those who are not.¹⁴ The same is true in countries where English is not the dominant or majority language. For instance, in Israel, another small economy pursuing export-oriented growth, "English speakers are at a decided advantage."¹⁵ The earnings of Hebrew speakers who report English as their second language are higher than of those who speak Hebrew only. Even those who speak English as a first language and Hebrew as a second have a slight earnings advantage over those who speak Hebrew alone.¹⁶

The English "language has become so prevalent that it is increasingly being thought of not as a foreign language, but as a basic skill like mathematics."¹⁷ Not surprisingly, the proportion of non-English-speaking countries where English is the first foreign language in the primary and secondary school curriculums has dramatically increased over time.¹⁸ The list now includes countries with no history of English colonization and as regionally and economically diverse as Algeria, China, Finland, Japan, Germany, Greece, Morocco, Norway, Poland, Spain, and Switzerland. China, Japan, Malaysia, Singapore, South Korea, and Taiwan are a few of the countries taking additional steps to raise the standard of English because they do not want to lose their competitive advantage in the global economy.¹⁹

Finally, while it seems logical that multinational firms from English-speaking countries would desire a labor force proficient in English, the same seems to be true for most multinational companies regardless of their country of origin, but especially if the home language is not widely used outside their country. For example, Japanese multinationals prefer to invest in countries where the labor force is proficient in English.²⁰ The English proficiency of a company's labor force "influences the mechanisms of, and management's ability to, control subsidiary activities."²¹ Many multinationals, such as the French telecommunications giant Alcatel, the Finnish elevator manufacturer Kone, and the Danish toy maker Lego, use English as their internal language of communication around the world. In turn, multinationals reward English proficiency with higher wages. For example, English language proficiency is one reason why foreign firms in Japan pay higher wages than domestic firms.²²

Language Instruction Choices and Political Considerations

Educational systems are also shaped by political considerations, with the objectives being the formation of citizens as well as workers.²³ Thus, political factors such as the party system, nation-building strategies, and interest groups shape language policy. The importance of each factor varies from case to case and over time, and has

implications for the rate and degree of adaptation of the language instruction policies to the requirements of an economic strategy based on the attraction of foreign capital and the promotion of exports.

Choices about language instruction can be motivated by the efforts of political elites to acquire and retain power.²⁴ In Singapore, Ireland, and Puerto Rico the language education policies that shape the educational curriculum under export-oriented industrialization were adopted during a time of transition in political status and institutions when the dominant party—the People's Action Party (PAP), Fianna Fáil (Soldiers of Ireland), and the Popular Democratic Party (PPD), respectively—sought to consolidate its power. In Singapore the policy of multilingualism preceded the PAP, but after independence it enforced the policy to gain the political support of the Chinese-educated elites and masses that believed that their culture and language were facing annihilation. Fianna Fáil's nationalist ideology separated the Irish nation from the British not only politically and economically but also culturally. In Puerto Rico selection of Spanish as the language of instruction in public schools during a time of intense nationalism was a popular act of autonomy by the PPD and the first democratically elected governor of the island.

In the process of nation building, the choice of the language of instruction and language or languages that will be taught in schools can be part of an effort to provide a diverse group of people with a common identity and to make communication possible, as in Singapore in the 1950s, to give a newly independent country a sense of belonging to a new nation and to differentiate it from the colonizer, as in Ireland in the 1920s, and to challenge the classification imposed by the colonizer and also give the people a sense of autonomy and community, as in Puerto Rico in the 1940s.²⁵

Language instruction policies also respond to the pressure of interest groups and society as a whole.²⁶ In Singapore the pressures of the Chinese-educated elites, students, and unions have been an important consideration in shaping the bilingual policy followed by the English-educated leaders of the PAP. In Ireland the Irish National Teacher's Organization (INTO) was among the earliest proponents of the Irish revival policy. It reversed its position for pedagogical reasons but was rebuffed by Fianna Fáil. In Puerto Rico the Teachers' Association has long been considered one of the best organized interest groups on the island and a staunch opponent of English as a medium of instruction. Its opposition to attempts by the insular department of education to promote English is among the most important factors explaining the failure to strengthen English instruction in public schools.

Comparing Singapore, Ireland, and Puerto Rico

There are economic similarities among Singapore, Ireland, and Puerto Rico, all

small island nations with long colonial histories, that justify a comparative analysis of their language curricular policy. First, the key to their industrialization has been an export strategy based on the attraction of foreign direct investment through tax breaks. This strategy contributed to the transformation of these islands into economic miracles within their respective regions. Second, the shift from import substitution to an export strategy based on the attraction of foreign capital is easily identified. Third, English proficiency has been associated in these nations with higher wages, the attraction of foreign capital, and economic growth. The transition to export-oriented industrialization resulted in pressures for language instruction reform.²⁷

In spite of these similarities, there is variation in the rate and degree to which language policies have been adapted to meet the requirements of export-oriented industrialization. In Singapore the goal of attracting foreign capital resulted in swift changes in the language curriculum; in Ireland the changes were incremental; and in Puerto Rico there have been no changes (see Table 1). Not all the curriculum changes were qualitatively similar. Unlike Ireland, Singapore and Puerto Rico did not just adjust the proportion of English in the curriculum. However, the question here is to explain the rate at which changes in the language curriculum policy may or may not occur as a result of a shift in economic policy. Accordingly, in Singapore the transition to export-oriented industrialization in 1966 entrenched the need to spread English education as a prerequisite for growth. The People's Action Party declared that all students would be required to learn a second language, thereby forcing them to study their mother tongue as well as English. In Ireland primary school instruction in Gaelic was instituted after independence in 1922, and the policy became intimately tied to the cultural, political, and economic nationalism promoted by the dominant party, Fianna Fáil. After the shift to export-oriented industrialization in the early 1950s, the language revival policy was maintained until its educational weakness became impossible to ignore and policymakers became exposed to ideas linking education to economic growth. In Puerto Rico no changes materialized after instruction in English was abolished in 1949, two years after export-oriented industrialization became implemented. The policy, associated with the "soft" nationalism promoted by the Popular Democratic Party, continues practically unchanged in spite of the wage differentials between English and non-English speakers.

The policy outcome in terms of the degree of congruence between export-oriented industrialization and language policy in place today also differs. It is high in Singapore, medium to high in Ireland, and low in Puerto Rico (see Table 1). This variable is measured by examining the degree to which the language with the greatest value for the purpose of attracting foreign capital, in this case English, has become an important component of the school curriculum. But another important component of this measure is the economic value of the vernacular. The economic value of the nationalistic language—Mandarin in Singapore, Gaelic in Ireland and Spanish in Puerto Rico—is

Table 1 Dimensions of Language Instruction Policies in Singapore, Ireland, and Puerto Rico

	Party-consolidation strategy	Nation-building strategy	Interest Groups	Process of adaptation to export-oriented industrialization (EOI) strategy	Degree of congruence between EOI and language policy
Singapore	People's Action Party (PAP) advocates support for multilingualism at the same time it promotes and facilitates English instruction.	English promoted by PAP as only neutral language.	Chinese-educated elites and students want their language protected. PAP requires all students to learn a second language (1966).	Swift: English proficiency promoted as conducive to economic growth.	High
Ireland	Economic, political and cultural nationalism promoted by Fianna Fáil facilitates its dominance but results in the maintenance of a pedagogically flawed Gaelic revival policy.	Gaelic revival policy at the expense of English, Math, Science and other subjects consistent with economic and political nationalism promoted by Fianna Fáil.	Irish National Teachers' Organization (INTO) initially supports revival but later reverses its position. Fianna Fáil ignores INTO's pedagogical concerns.	Incremental: "Compulsory Irish" policy maintained for twenty years after transition to EOI.	Medium to High
Puerto Rico	Language policy became tied to the discussion about the political status of the island. A reversal of Spanish medium policy not even considered by the Popular Democratic Party (PPD).	Establishment of Spanish medium instruction in public schools promoted as a symbol of political autonomy by the PPD and the nationalist teachers' unions.	Teachers' unions are among the strongest groups and against strengthening English instruction. Dominant parties have avoided a showdown with the unions.	Stagnant: English as a medium of instruction repealed shortly after transition to EOI. English instruction in public schools is considered sub optimal.	Low

inversely related to the costs to export-oriented industrialization of teaching that language versus teaching English. The value of Mandarin is high. Even though other dialects are spoken in Singapore, Mandarin is considered the vernacular of the ethnic Chinese. It is one of the most widely spoken world languages, and the People's Republic of China is a very important market for Singapore. The value of Gaelic is low. Globally, it is a marginal language. Although there is some economic value for those who speak it, the economic costs of not speaking English are much higher than the costs of not speaking Gaelic. The value of Spanish is high. It is also one of the most widely spoken world languages. Puerto Rico has attracted foreign investment from Spain, and U.S. firms with operations in Latin America employ Puerto Ricans. Thus, the cost to export-oriented industrialization of teaching either Mandarin or Spanish at the expense of English is lower than the cost of teaching Gaelic.

The degree of congruence between export-oriented industrialization and the language curriculum is high in Singapore because English is valued so much that it has become the medium of instruction in all schools. The same is true in Ireland, where English is the dominant language. But Mandarin, the second most important language taught in Singapore (in terms of numbers of students), has a higher economic value than

Gaelic. The marginality of the Gaelic language makes the cost of teaching it higher than the cost of teaching Mandarin to Singaporean students. In Puerto Rico the degree of congruence is low because the language policy has not been changed to train the population at large to meet the requirements of export-oriented industrialization, especially during its second stage of higher value-added exports. It is low in spite of the fact that Spanish has a higher economic value than Gaelic, because English is the dominant language in Ireland, whereas English is very poorly taught as a second language in Puerto Rico.

Cross-national and longitudinal variations in the political system can explain the evolution and outcome of language instruction policies in these nations. The sequence of events illustrates the interplay of factors that result in a variety of language strategies during the shift from import substitution to export-oriented industrialization. Particularly important are dominant party consolidation strategies, partisan notions of nationalism that have shaped the school curriculum, and the role of unions, students, and other interest groups. In all three countries a demand for English instruction emerges from the wage differentials between English and non-English speakers. It is therefore important to assess and explain the rate and degree to which the language education policies have been adapted to meet the functional requirements of export-oriented industrialization (see Table 1).

Singapore

Singapore swiftly adapted its language instruction policies to the requirements of export-oriented industrialization, and the final outcome shows a high degree of congruence between language and economic policies. The same year the new economic strategy was announced, the government declared that all students were required to learn English and either Mandarin, Malay, or Tamil. As part of a strategy to consolidate its power, the People's Action Party (PAP) had supported a policy of multilingualism that helped it secure the support of Chinese-educated elites, students, and unions without alienating the Malay and Tamil population.²⁸ Except for a brief interlude, when there was an effort to promote Malay, the official policy continued unchanged. After the transition to export-oriented industrialization, however, there was a greater effort to promote English as an important component of the new economic strategy. English was also promoted as the *lingua franca* in the process of nation building and served to make Singapore "less Chinese." Wage differentials between English and non-English speakers also contributed to the strengths of the language. The adaptation of the language curriculum to the requirements of export-oriented industrialization culminated in 1987 when English became the language of instruction in all schools.

Language Education Policies Prior to Export-Oriented Industrialization

According to the 1947 census, 77 percent of the population of Singapore was Chinese, 12 percent Malay and 8 percent Indian.²⁹ The only government schools were the Malay vernacular primary schools, and the English primary and secondary schools. There also were about 300 Chinese schools and a number of Indian schools. The Chinese schools followed the curriculum of, used textbooks published in, and employed teachers recruited in China.

In 1947 the colonial government adopted a program aimed at providing six years of primary education in any of the four main languages: Chinese (Mandarin), Malay, Tamil, and English. Parents were free to choose the language stream in which they wanted their children educated. The opportunities available to English speakers, however, resulted in a demand for English education that exceeded the demand for Chinese medium schools, and most of the funds were allocated to expanding English instruction.³⁰

During the 1950s Chinese elites, students, and unions accounted for most political activity. One of their goals was to protect their right to learn and teach the Chinese language. PuruShotam explains:

the most easily referenced hostility pertained to the dominant position of the English language. . . its dominance . . . appeared to be potentially threatening to the very survival of the Chinese medium schools. This in turn meant that the vast pool of communist sympathizers would also be threatened, as were the teaching and other related staff.³¹

Chinese students had very few secondary schools and no opportunities for tertiary education. Existing schools were inadequate, and there were not many job opportunities available for graduates of Chinese secondary schools.

The People's Action Party emerged to balance the demand for English and Chinese. Founded in 1954, the PAP resulted from an alliance between Communist, Chinese-educated trade unionists and moderate, English-educated middle class nationalists. The PAP's English-educated faction was well aware that such an alliance was "dangerous," but also essential, because any party seeking the support of Chinese-educated and working class Singaporeans could not be seen as "anti-communist."³² Lee Kuan Yew, a British-educated lawyer, became the secretary-general of the party, which advocated independence for Singapore through a merger with the States of Malaysia. In 1955–56 strikes, riots, and demonstrations resulted in the arrest of many of the newly elected left-wing members of the PAP's central committee. With the left-wing leadership of the PAP in jail, the moderate wing had the opportunity to consolidate its control over the party.³³

Students' grievances, however, were seen by many as legitimate. The government responded by appointing an all party committee to study the problem of Chinese medium schooling. The all party report officially supported a policy of multilingualism and recommended that all schools be treated equally. "This meant increased financial aid to vernacular schools and the assurance that the vernaculars would be fostered rather than threatened with extinction."³⁴ English was declared an official language along with Mandarin, Tamil, and Malay.

In 1958 Singapore gained control over its domestic affairs, and new elections were scheduled. The PAP's platform argued that economic growth in Singapore depended on the creation of a common market as part of the Malaysian Federation. It was generally agreed that manufacturing should provide the engine for growth. But the local market was small, hence the support for a merger with Malaya that would offer Singapore access to a larger market. The PAP won the 1959 elections, and Lee Kuan Yew became prime minister. He had an interest in securing the support of Malaysians for the merger and tried to make Singapore's education policies compatible with Malaya's. Thus, the PAP declared Malay the national language of Singapore and made efforts to promote it. However, politically the party could not revoke the policy of multilingualism, whereas the Malaysian Federation "held firm to a policy of one official and national language as the agent of unity."³⁵ Reacting to the concern that Communism would overtake Singapore, Malaya agreed to a merger, and the Federation of Malaysia was created.

Transition to Export-Oriented Industrialization In 1965 the prime minister of Malaya decided to expel Singapore from the federation. Left without access to the federation's market, Singapore's expulsion also signified the collapse of the import-substitution industrialization strategy. Almost immediately, the PAP government switched to export-led industrialization.

"Language hostilities" had been one of the motives that prompted the expulsion of Singapore from the federation and the perception that the island was "a Third China." The PAP reacted by keeping Malay as one of its official languages but dropping efforts to promote it and refusing to embrace Chinese at the expense of other languages. When the Chinese-educated asked Lee to declare Mandarin the official language of Singapore, he refused.³⁶ Still, keenly aware of the political costs of appearing to reject Chinese, Lee enrolled his children in Chinese medium schools. The new goal of the party was to promote English, but Lee explained that "to announce that all had to learn English when each race was intensely and passionately committed to its own mother tongue would have been disastrous."³⁷ The importance of learning English, however, was reinforced by the government, which argued that foreign investors would prefer an English-speaking labor force.

The language goals of the party coincided with the actions of Singaporean parents, who continued to enroll their children in English schools. The Chinese-educated elites responded to the decline in Chinese school enrollments by launching a "Promote Mother Tongue Education" month. A week after the program for the month was announced, the PAP declared that primary and secondary school students would now be required to learn a second language. From that moment on, there was no way that students could learn English, Mandarin, Tamil, or Malay exclusively. English and a "mother tongue" were irrevocably tied. The new policy "made Chinese medium education redundant . . . Why send your child to Chinese stream schools when the timetable of an English medium school ensured exposure to Chinese for up to forty per cent of the time

a child spent in school?"³⁸ Finally, in response to the continued demand for English medium instruction and the importance ascribed to the language by the PAP, English became the language of instruction in all schools in 1987.

The use of English in Singapore serves many of the purposes advocated by the PAP. It is the only neutral language and thus facilitates communication among the different ethnic groups. It is also the language of government and business and helps advance export-oriented industrialization. After the collapse of the merger, the English-educated leaders of the PAP made bilingualism compulsory. The role of Chinese elites, students, and unions was important to the extent that it compelled the PAP to uphold its commitment to multilingualism. The aim of a Chinese-speaking society, however, was thwarted by the language goals of the English-educated rulers of the PAP and job and wage differentials between English and non-English speakers that led parents to opt for English stream schools. Thus, language instruction policies were adapted swiftly to the exigencies of an economic strategy geared to the attraction of foreign direct investment and promotion of exports, and there was a high degree of congruence between both sets of policies.

Ireland

Language education policy in Ireland adapted gradually to the requirements of export-oriented industrialization. While English is the majority language, the degree of congruence between export-oriented industrialization and language instruction is medium to high because of the negligible value of Gaelic in the global economy. From the 1920s onwards the goal of Irish proficiency dominated school curriculums at the expense of other subjects such as mathematics, science, and English.³⁹ The association of the Irish language with Fianna Fáil fit nicely with its nationalist political ideology and contributed to its ability to become the dominant party. Since the political strategy of the party consisted as well in promoting greater economic and political independence from the British Commonwealth, there was little value ascribed to the English language. Thus, the party ignored calls by the opposition, the largest teachers' union, and others to end the policy known as "compulsory Irish." The initial transition to export-oriented industrialization followed a period of considerable electoral uncertainty for the party. But while Fianna Fáil was willing to abandon its protectionist economic strategy, it was less flexible when it came to the language revival policy. It abandoned this policy twenty years after the implementation of export-oriented industrialization in the 1950s. Today, Irish is no longer the medium of instruction, but instruction in Gaelic takes precedence over Spanish, German, and French, languages that are considered more important for export-oriented industrialization.⁴⁰

Language Education Policies Prior to Export-Oriented Industrialization The decline of Irish began in the mid 1700s. By the early twentieth century the majority

language in Ireland was English. "The Irish people were surrounded by a world whose business was carried on through the medium of English, a world which was seen as economically more prosperous than Gaelic-speaking Ireland, Irish often being associated with poverty."⁴¹

To reverse the trend, the government announced in 1922 that the Irish language was to be taught or used as a medium of instruction for at least one hour a day in primary school. The curriculum change had been part of the proposals made by the Irish National Teachers' Organization (INTO). In 1924 it was decreed that secondary school teachers who gave instruction through the medium of Irish would receive bonus payments.⁴² From 1928 Irish became a required subject for the intermediate certificate and from 1934 a required subject for the leaving certificate. In 1926 Irish became the sole medium of instruction during the first two years of primary school. "In a clear statement of the importance and primacy it attached to Irish, the [government] advised the elimination of drawing, elementary science, hygiene, nature study and needlework as obligatory subjects on the primary school curriculum in order to facilitate concentration on the language."⁴³

In May 1926 Fianna Fáil, the party that would make language revival policy an integral component of its electoral strategy, was established under the leadership of Eamon de Valera. Within a few years it became the largest party, winning an absolute majority in the Dáil (Irish parliament) in 1933. During Fianna Fáil's first few years in office the policy with the greatest economic impact was the six year economic war with Britain. Once in office de Valera refused to pay the land annuities it "owed" to the British government. The British responded by imposing duties on Irish cattle and dairy products. The severity of Britain's reaction rallied public support behind Fianna Fáil and facilitated a sweeping change of direction in economic policy away from free trade and towards protectionism. The language revival policy dovetailed with the party's protectionist agenda.

Eamon de Valera, the leader, and Tomás Derrig, the new Minister for Education, saw the revival of Irish as being intimately associated with their party's doctrine of economic nationalism. They wanted every citizen to know and respect Gaelic history and traditions. The national pride thus generated, they argued, would help make the national economy self-sufficient and the country a place of frugal comfort.⁴⁴

Thus, in their view Gaelic, not English, would lead the way to economic security. Derrig criticized the slow pace of gaelicisation under the previous government and took steps to expedite the process. Despite concerns raised by INTO that other subjects were being hurt by the usage of Irish as the medium of instruction, the department of education "assured teachers that if they failed to cover the entire syllabus in history and geography due to their efforts in Irish, their marks in efficiency would not be affected."⁴⁵ Further simplification of the curriculum requirements in English, algebra and geometry, and rural science followed as part of Fianna Fáil's *Revised Program of Primary Instruction*.⁴⁶

Initially the opposition parties, the Labor Party and Fine Gael, supported the language revival policy. In time, however, they also became highly critical of the government's policy, arguing that it "was resulting in people being illiterate in two languages."⁴⁷ Parents also complained that their children were not receiving an education fit for emigration to English-speaking countries.⁴⁸ De Valera and Derrig became more entrenched. Since the economic policy promoted by the party was protectionist and repudiated foreign investment, there was little economic value attributed to English by Fianna Fáil. Thus, in 1943 Derrig declared that "we cannot restore Irish without making a major effort against English."⁴⁹

Transition to Export-Oriented Industrialization The 1940s and 1950s were a period of considerable economic and political uncertainty, and Fianna Fáil faced serious electoral challenges. Criticism of the revival policy continued as years of economic depression made it evident that Irish proficiency would not guarantee economic growth. In 1948, after sixteen years of uninterrupted rule by Fianna Fáil, a coalition of conservative, populist, and left-leaning parties took office as the first interparty government. It was under this coalition government that reforms to encourage industrialization, exports, and foreign investment were first introduced. A second interparty government (1954–1957) continued the progress towards the implementation of an export-oriented strategy.⁵⁰

Though the interparty governments initiated the country's shift to export-oriented industrialization, the newly elected government of Fianna Fáil under the leadership of the former minister of industry and commerce, Seán Lemass, was credited with the comprehensive switch from protectionism to free trade and export-led growth. Lemass's endorsement of export-oriented industrialization reflected the party's "conscious attempt...to reconstruct its dominant political appeal through means other than simply emphasis on its nationalist pedigree."⁵¹ Though Lemass was willing to endorse a radical change in the economic strategy of the Irish state, he was less flexible when it came to the language education policy of the Irish nation. The prime minister had been ardent in his defense of Irish in the curriculum during the interparty government years. His party was so identified with the policy of gaelicisation that, as Horgan explains, "the political costs of abandoning compulsion were so gigantic—and so readily imaginable—that such a prospect did not even appear on the [party's] political agenda."⁵² Thus, in 1961, when Fine Gael announced that if elected it would end compulsory Irish, Lemass defended the policy vigorously. He also made the case that, now that the country was vying for membership in the European Community, there was a need to "preserve and develop every characteristic and value which distinguishes us from other nations."⁵³

The first economic plan under Lemass lasted from 1959 to 1963 and coincided with economic growth. In the meantime, the department of education became

exposed to ideas that tied economic growth to education. By 1964 the "intellectual backlash against what were perceived to be the detrimental effects of excessive emphasis on Gaelic" caught momentum. In 1966 the publication of *Bilingualism and Primary Education* caused even more concern because it argued that Irish children were two years behind English children in English comprehension and delayed in problem arithmetic.⁵⁴ A new curriculum was finally introduced in 1971. It kept Irish as a required course but not as the medium of instruction. The requirement of Irish to pass the various certificate examinations continued to guide curriculum instruction in secondary schools until 1973, when the newly elected government of Fine Gael removed it.⁵⁵

Today, Ireland is one of only two English-speaking members of the European Union and the only English-speaking member of the Euro Zone. Language is repeatedly mentioned as one of the factors that give Ireland a competitive advantage.⁵⁶ Still, the degree of congruence between the economic strategy and language instruction policy is not as high as in Singapore. In Ireland the adaptation of language instruction policies to the requirements of export-oriented industrialization occurred gradually. Historically, an important component of Fianna Fáil's winning image was its nationalist ideology. Thus, it refused to alter its language policy in spite of accusations that the policy resulted in functional illiteracy in both English and Irish. Today, Irish instruction continues amid criticism and debate between those who see the language as an unnecessary skill in the new economy and those who value its cultural significance. Until five years ago instruction in French, German, and Spanish (languages with greater economic value than Gaelic) was all but ignored by the Irish government. Language instruction is seen as a weakness of an educational system in charge of training students with the skills needed to compete in the world economy.⁵⁷ The language policy, however, remains a legacy of the economic, cultural, and political isolationism promoted by Fianna Fáil.

Puerto Rico

In Puerto Rico the adaptation of language instruction to an outward economic policy has been largely stagnant, and the degree of congruence between the island's language policy and economic policy low. The Popular Democratic Party (PPD) instituted Spanish as the language of instruction in public schools in 1949, two years after the transition to export-oriented industrialization began. A reversal of the language education policy was never considered by the dominant PPD. Part of the reason has been that protection of the Spanish language helps the party maintain its nationalist cultural image. Additionally, strong opposition by the teachers' unions, which have been more influential in Puerto Rico than in Ireland and Singapore, has contributed to the lack of progress on the issue. Even after the loss of the PPD's political supremacy and the ascendancy of the prostatehood New Progressive Party

(PNP), the teachers' unions have been successful in opposing the strengthening of English instruction in public schools. The same language policy has remained in place for over fifty years even though English proficiency is a required skill for employment in the lucrative private and federal government sectors and a skill that would foster the government's strategy of export-oriented industrialization.⁵⁸ Thus, despite the fact that Spanish has a high economic value, there is a low degree of correlation between the language and economic policies because English is the most important language with the greatest economic value in promoting export-oriented industrialization on an island economically linked to the U.S.

Language Instruction Policies Prior to Export-Oriented Industrialization At the end of the nineteenth century Puerto Rico had only a few public primary schools, one public secondary school, and no university. Over 90 percent of children five to seventeen years of age were not in school, and over 70 percent of the population was illiterate.⁵⁹ Spanish was the vernacular language of the entire population. Newly arrived U.S. administrators believed that the Puerto Rican people should be educated culturally in order to take advantage of their new association with the world's largest economy. Thus, there was a concerted effort to expand the number of primary and secondary schools.

Between 1900 and 1949 different language education policies were implemented by the various commissioners of education appointed by U.S. presidents. Though the specific policies differed slightly, the general goal was "culturo-linguistic" assimilation.⁶⁰ The emphasis on English was such that an education survey undertaken in 1926 by Teachers College at Columbia University reported that the curriculum of the elementary school system was primarily and practically exclusively an "[English] language curriculum."⁶¹

Barreto explains that the assimilationist education policy of the U.S. government had two notable consequences: an increase in Puerto Rican nationalism and the growth in importance and political influence of the Puerto Rican Teachers' Association (AMPR). Puerto Rican teachers were steadfastly opposed to the use of English as the sole medium of instruction. Their jobs were threatened by the new curriculum policy and by a 1905 school law that required teachers to pass an English-language examination. Failure to pass the examination during a three-month period would result in suspension and possible loss of the teacher's license. Higher paid U.S. mainland teachers were also preferred.⁶² The Teachers' Association began to lobby the territorial legislature for changes in the policy. In turn, Puerto Rican "politicians advocating greater autonomy used the language dispute as an important tool in their rhetorical repertoire against the American colonial system."⁶³

Transition to Export-Oriented Industrialization The PPD was organized in 1938 under the leadership of Luis Muñoz Marín and won a majority in the senate in 1940 and

a majority in both houses of the legislature in 1944. Muñoz Marín was able to implement many of its electoral promises, but Puerto Rico's experiment with import-substitution industrialization failed. Many of the government-owned companies operated at a loss, and strikes affected their productivity. The leadership of the PPD then decided that industrialization would be achieved not with government enterprises but through the attraction of private foreign capital. The strategy to lure U.S. investors to the island included not only low wage labor but also a 100 percent local tax exemption, to work in conjunction with U.S. federal tax breaks that allowed tax-free investments in U.S. possessions.⁶⁴

Education policy continued to be dominated by language concerns. The controversy intensified in 1946, when a bill making Spanish the language of instruction cleared both chambers of the Puerto Rican legislature. The appointed governor of the island referred the bill to then President Truman, who vetoed it. By this time, pedagogical reasons notwithstanding, the demand for Spanish "had become part of the drive for self-government . . . the adherence to" English as the medium of instruction "was now a symbol of federal interference in the exercise of fundamental rights by the people of the island."⁶⁵ Thus, when in 1948 Muñoz Marín became the first elected governor of Puerto Rico, his commissioner of education issued a decree that made Spanish the sole language of instruction in public schools, with English as a required course.

According to Morales Carrión, "since its beginnings, the PPD included two wings: one that favored independence and one that favored autonomy or dominion status." Though the autonomist wing was dominant, "supreme ability was required to orchestrate these divergent views."⁶⁶ The break came in 1946, when the pro-independence faction became the Puerto Rican Independence Party (PIP). Nevertheless, the PPD sought the support of those who were ideologically against a stronger political and cultural union with the U.S. but willing to be pragmatic about the political status of the island in light of the likely economic hardships that would follow independence. Additionally, the Teachers' Association, whose members represented over 90 percent of all school and university teachers and was considered the best organized interest group on the island, had continued to lobby for Spanish as the sole medium of instruction. Some of the teachers had joined the Nationalist party, but the vast majority supported the PPD.⁶⁷ Domestic control over language policy was "an important gain for self-government in a very sensitive area" and permitted the PPD to cement its cultural nationalist image.⁶⁸

The Commonwealth or Associated Free State of Puerto Rico was established in 1952. By that time it was clear that the new economic policy was a success, and it resulted in an increase in the demand for English instruction. Changes to the public school language curriculum have been proposed at various times by legislators and secretaries of education, but, regardless of whether the changes proposed promote the strengthening or weakening of English instruction, none of them has gone very far. ⁶⁹ Puerto Rican "teachers still culturally resist the United States and much of that

resistance still targets the English language.⁷⁰ The general population does not share the teachers' hostility to the English language, however, because they see its economic value both in Puerto Rico and around the world. Having their "children learn English is a key goal for most Puerto Rican parents."⁷¹ Prostatehood advocates also emphasize the economic advantages of being bilingual. However, "historically the party [has] wanted to avoid a showdown with the two major teachers' unions—the larger Asociación de Maestros de Puerto Rico and the smaller, though more militant, Federación de Maestros de Puerto Rico."⁷² Moreover, such a move opens the PNP to accusations by the PPD and PIP that it is promoting cultural assimilation.

According to the 2000 U.S. census, less than one-third of the people residing in Puerto Rico are able to speak English fluently. At the same time, the main business publication on the island has reported that many jobs, especially those in the high tech industries the government seeks to attract, can not be filled because candidates lack English language skills.⁷³ However, contrary to what the functionalist approach would predict, the demand for English has not been met by the government even though it would seem to contribute to the advancement of an export-oriented strategy based on the attraction of foreign investment. The language instruction policy is part of the legacy of the cultural nationalism promoted by the PPD and has dovetailed with the interests of the teachers' unions, whose jobs continue to be threatened by a change of policy in favor of English.

Discussion and Conclusion

If the conventional functionalist rationale is followed, language education policies in Singapore, Ireland, and Puerto Rico should have adapted to meet the requirements of export-oriented industrialization. Small nations pursuing an export-oriented growth strategy based on the attraction of foreign direct investment have to use every tool at their disposal to gain a competitive advantage toward countries with large markets. Since one of the costs of investing abroad are communication costs, and the language in the world of business, science, and technology is English, small nations are under pressure to ensure that the labor force is proficient in English. But language education policies are not exclusively a response to the functional requirements of an economic model. In Singapore, Ireland, and Puerto Rico language instruction policies have been shaped by discrete patterns of dominant party consolidation, nation building, and interest group politics. A variety of processes and outcomes have affected the degree to which language policies have met the requirements of export-oriented industrialization.

Singapore's adaptation of its language instruction policies to export-oriented industrialization was swift. The policy of bilingualism (English and either Mandarin, Malay, or Tamil) may have originated with the All Party Report (1956), but it became compul-

sory only in 1966, the same year the PAP began to implement its policies to attract foreign investment. Today, English is the language of instruction in all schools, while Mandarin—a valuable world language—is the second-most important language taught, thus resulting in a high degree of correlation between the language and economic policies. By contrast, Ireland's adaptation to the language requirements of the export-oriented model was incremental. It took twenty years after the transition to export-oriented industrialization before the Irish revival policy was ended. Today, English instruction takes precedence over Gaelic. But the latter takes precedence over instruction in other modern languages with greater economic value, thus resulting in a medium to high degree of correlation between language and economic policies. Finally, Puerto Rico has yet to adapt its language education policies to its economic strategy. The policy that instituted instruction in Spanish and rejects the goal of English proficiency has remained in place for fifty years after its implementation, thus resulting in a low degree of congruence between language and education policies.

With only three cases, it is impossible to isolate the most important causal factor in the adaptation to the export-oriented industrialization strategy or the degree of congruence between export-oriented industrialization and language policy. The politics of language policymaking in Singapore, Ireland, and Puerto Rico suggest that the demand for instruction in a valued language needs to coincide with the interests of the dominant party or parties. In Singapore job opportunities and wage differentials between English and non-English speakers resulted in an increased demand for English medium instruction, which the PAP has met because it coincided with its interest in promoting the English language as a *lingua franca* and making the island's labor force more attractive to foreign investors. In Ireland English had already become the majority language by the time of independence, but the goal of Fianna Fáil was to make Gaelic the dominant language. English was not considered a valuable language by an isolationist party engaged in nation building. Thus, Fianna Fáil refused to alter its language policy in spite of criticism by the teachers' union, opposition parties, and others. It maintained the policy even when English became more valuable than Gaelic after the transition to export-oriented industrialization. Finally, in Puerto Rico the PPD supported the shift to Spanish after the transition to export-oriented industrialization because it corresponded with its cultural nationalist image. The PNP espouses a closer political relationship with the U.S. but also promotes a nationalist image on language issues. Finally, in an effort to gain and consolidate power both the PPD and the PNP have been sensitive to the interests of the teachers' unions, effectively ignoring the demand for English instruction that originates from the wage differentials between English and non-English speakers.

Small, export-oriented economies have a strong incentive to teach English as widely as possible. Singapore, Ireland, and Puerto Rico had similar economic needs and adopted virtually identical economic strategies but contended with different political traditions and institutions. Singapore and Ireland are now fully independent

states; nation building is no longer imperative. Puerto Rico is neither an independent state nor a member of the federal union with full political rights. Thus, in Singapore and Ireland the issue of English instruction is no longer associated exclusively with British colonialism, whereas in Puerto Rico it is still associated with American imperialism and separates both nations.

NOTES

Research was supported by Temple University and by Princeton University's Center of International Studies at the Woodrow Wilson School. For their insightful comments on an earlier draft I thank Nancy Bermeo, Miguel Centeno, Arista Cirtautas, Mauro Guillén, Norma Kriger, Anne Porter, and participants of the Visiting Fellows Seminar at the Center for International Studies, as well as two anonymous reviewers.

1. Amílcar A. Barreto, *Language Elites and the State* (Westport: Praeger, 1998); David Laitin, *Language Repertoires and State construction in Africa* (New York: Cambridge University Press, 1992); David Laitin, *Identity in Formation* (Ithaca: Cornell University Press, 1998); Brian Weinstein, *The Civic Tongue* (New York: Longman, 1983).
2. Keith Watson, "Language, Power, Development and Geopolitical Changes," *Compare*, 29 (June 1999), 5–22.
3. Barry R. Chiswick and Paul W. Miller, "The Endogeneity between Language and Earnings," *Journal of Labor Economics*, 13 (April 1995), 248.
4. S. Wright, "Language Planning and Policymaking in Europe," *Language Teaching Journal* (July 1995), 148–49; Weinstein, pp. 101–2.
5. Stewart Ford and Roger Strange, "Where Do Japanese Firms Invest within Europe and Why?," *Transnational Corporations*, 8 (April 1999), 117–42; David Crystal, *English as a Global Language* (Cambridge: Cambridge University Press, 1997); Eugene Garfield, "The Language of Science Revisited," *Current Comments*, 31 (July 1990), 280–94; Neil Hood and Thorsten Truijens, "European Locational Decisions of Japanese Manufacturers," *International Business Review*, 2 (February 1993), 39–63; Irving Kravis and Robert Lipsey, "The Location of Overseas Production for Exports by U.S. Multinational Firms," *Journal of International Economics*, 12 (May 1982), 201–23; Claudy C. Culem, "The Locational Determinants of Direct Investment among Industrialized Countries," *European Economic Review*, 32 (April 1988), 885–904.
6. Fernanda M. Astiz, Alexander W. Wiseman, and David P. Barker, "Slouching towards Decentralization," *Comparative Education Review*, 46 (February 2002), 66–88; Martin Carnoy and Diana Rhoten, "What Does Globalization Mean for Educational Changes?," *Comparative Education Review*, 46 (February 2002), 1–9.
7. Carnoy and Rhoten, p. 5. See also Robert R. Kaufman and Alex Segura-Ubiergo, "Globalization, Domestic Politics, and Social Spending in Latin America," *World Politics*, 53 (July 2001), 553–87; Nita Rudra, "Globalization and the Decline of the Welfare State in Less Developed Countries," *International Organization*, 56 (April 2002), 411–45.
8. Walter McMahon, *Education and Development* (Oxford: Oxford University Press, 1999); Nancy Birdsall, David Ross, and Richard Sabot, "Education, Growth and Inequality," in Nancy Birdsall and Frederick Jaspersen, eds., *Pathways to Growth* (Washington, D.C.: Inter-American Development Bank, 1997), pp. 93–127.
9. Birdsall, Ross, and Sabot.
10. For a dissenting view, see Adrian Wood and Cristóbal Ridaó-Cano, "Skill, Trade and International Inequality," Working Paper 47 (Brighton: Institute of Development Studies, University of Sussex, n.d.).
11. Sarosh Kuruvilla, "Linkages between Industrialization Strategies and Industrial Relations/Human Resource Policies," *Industrial Relations Review*, 49 (July 1996), 635–57.
12. Peter Katzenstein, *Small States in World Markets* (Ithaca: Cornell University Press, 1985).
13. Frederick Deyo, *Beneath the Miracle* (Berkeley: University of California Press, 1989); Stephan Haggard, *Pathways from the Periphery* (Ithaca: Cornell University Press, 1990); Kuruvilla; Sandra L. Suárez, "Political and Economic Motivations for Labor Control," *Studies in Comparative International Development*, 36 (Summer 2001), 54–81.
14. Chiswick and Miller, pp. 246–88; Barry Chiswick, Harry Patrinos, and Michael Hurst, "Indigenous Language Skills and the Labor Market in a Developing Economy: Bolivia," *Economic Development and Cultural Change*, 48 (January 2000), 347–67.
15. Barry Chiswick, "Hebrew Language Use," *Journal of Population Economics*, 11 (May 1998), 253–71.
16. *Ibid.* See also Ricardo Godoy, Ilana Redstone, Faisal Islam, Tanya Price, Amara Saeed, and Salamat Tabassum "English Proficiency and Quality of Life among Puerto Ricans," Sustainable Development Program, Heller School Working Paper (Waltham: Brandeis University, 2001).
17. *New York Times*, Apr. 16, 2001.
18. Cha Yu-Kyung, "Effect of the Global System of Language Instruction," *Sociology of Education*, 64 (January 1991), 19–32.
19. *International Herald Tribune*, Oct. 15, 2002. See also Crystal.
20. Ford and Strange. See also Culem; Hood and Truijens; and Rebecca Marschan, Denise Welch, and Lawrence Welch, "Language: The Forgotten Factor in Multinational Management," *European Management Journal*, 15 (October 1997), 591–98.
21. Rebecca Marschan-Piekkari, Denise Welch, and Lawrence Welch, "In the Shadow: The Impact of Language on Structure, Power and Communication in the Multinational," *International Business Review*, 8 (August 1999), 433.
22. Hiroshi Ono, "Foreign Ownership and Earnings in the Japanese Labor Market," Working Paper 1982 (Stockholm: Stockholm School of Economics, October 2003).
23. Susane Wiborg, "Political and Cultural Nationalism in Education," *Comparative Education*, 26 (May 2000), 235–43.
24. Laitin, *Language Repertoires*.
25. *Ibid.*; Weinstein; Laitin, *Identity in Formation*.
26. Weinstein.
27. Amílcar A. Barreto, *The Politics of Language in Puerto Rico* (Gainesville: University Press of Florida, 2001); Godoy, Redstone, Islam, Price, Saeed, and Tabassum; Lee Kuan Yew, *From Third World to First* (New York: HarperCollins, 2000); OECD, "Ireland's Economic Boom," *OECD Observer*, Internet ed. (Paris: Organization of Economic Cooperation and Development 1999).
28. Lee, pp. 145–56.
29. Nirmala PuruShotam, *Negotiating Language, Constructing Race* (Berlin: Mouton de Gruyter, 1998), p. 50.
30. C. M. Turnbull, *A History of Singapore 1819–1975* (Oxford: Oxford University Press, 1977), p. 240.
31. PuruShotam, p. 52.
32. Turnbull.
33. *Ibid.*, p. 260; Gary Rodan, *The Political Economy of Singapore's Industrialization* (New York: St. Martin's Press, 1989), pp. 58–59.
34. Dudley DeSouza, "The Politics of Language," in Evangelos Afendras and Eddie C. Y. Kou, ed., *Language and Society in Singapore* (Singapore: Singapore University Press, 1980), p. 205.
35. *Ibid.*, p. 210.
36. PuruShotam, pp. 62–63; Lee, p. 147.

37. Lee, p. 146.
38. PuruShotam, p. 67.
39. John Theodore MacNamara, *Bilingualism and Primary Education* (Edinburgh: Edinburgh University Press, 1966).
40. *The Irish Times*, Feb. 18, 2003.
41. Adrian Kelly, *Compulsory Irish* (Dublin: Irish Academic Press, 2002), p. 4.
42. *Ibid.*, p. 42; Norman Atkinson, *Irish Education* (Dublin: Allen Figgs, 1969).
43. Kelly, p. 43.
44. Thomas O'Donoghue, *The Catholic Church and the Secondary School Curriculum in Ireland, 1922–1962* (New York: Peter Lang, 1999), p. 73.
45. Kelly, p. 46.
46. *Ibid.*
47. *Ibid.*, pp. 47–48.
48. O'Donoghue, pp. 74–75.
49. Derrig, as quoted by O'Donoghue, p. 75.
50. O'Donoghue, p. 79; J. J. Lee, *Ireland 1912–1985* (Cambridge: Cambridge University Press, 1989), pp. 309–10; Eoin O'Malley, *Industry and Economic Development* (Dublin: Gill and MacMillan, 1989), pp. 72–73.
51. Peter Mair, *The Changing Irish Party System* (New York: St. Martin's Press, 1987), p. 141.
52. John Horgan, *Seán Lemass* (Dublin: Gill and MacMillan, 1997), p. 304.
53. Seán Lemass, as quoted in *ibid.*, p. 305.
54. MacNamara.
55. Máirtín Murchú, "Aspects of the Societal Status of Modern Irish," in Marin Ball with James Fife, eds., *The Celtic Languages* (Routledge: London 1993), p. 479.
56. *The Irish Times*, Sept. 17, 1999.
57. *The Irish Times*, Feb. 27, 2001.
58. Barreto, *The Politics of Language*.
59. Juan Jose Osuna, *A History of Education in Puerto Rico* (Rio Piedras: Editorial de la Universidad de Puerto Rico, 1949), p. 341.
60. Barreto, *Language Elites*, p. 90.
61. Osuna, p. 359.
62. Barreto, *Language Elites*, p. 90.
63. Barreto, *The Politics of Language*, p. 9.
64. James Dietz, *Economic History of Puerto Rico* (Princeton: Princeton University Press, 1986), p. 275; Sandra L. Suárez, *Does Business Learn? Taxes, Uncertainty and Political Strategies* (Michigan: University of Michigan Press, 2000).
65. Robert Fife and Manuel Herschel, *The Teaching of English in Puerto Rico* (San Juan: Department of Education Press, 1951).
66. Arturo Morales Carrión, *Puerto Rico: A Political and Cultural History* (New York: W. W. Norton, 1983), p. 265.
67. Barreto, *Language Elites*, p. 92.
68. Morales Carrión, p. 272.
69. Barreto, *The Politics of Language*; Erwin Epstein, *Politics and Education in Puerto Rico* (Metuchen: Scarecrow Press, 1970).
70. Barreto, *The Politics of Language*, p. 18.
71. *Ibid.*, pp. 19, 25.
72. *Ibid.*, p. 136.
73. *Caribbean Business*, Jan. 31, 2002.