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SOCIAL INCLUSION AND IT EDUCATION: AN INSTITUTIONAL ANALYSIS

Insertion Sociale et Education aux TIC: Une Analyse Institutionnelle

Completed Research Paper

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Abstract

This paper applies institutional theory to help understand the regulative, normative and cultural-cognitive influences that shape policies aimed at widening participation in IT education. It also employs such theory to explore the commitments of social actors in translating policy into action. Thus, this study aims to deepen the IS field's understanding of the institutional challenges facing governments, related agencies and educational organisations when implementing policies aimed at promoting social inclusion in and through the provision of IT-based education and training. The study achieves this by conducting (a) an institutional analysis of the Irish education sector and (b) a longitudinal study of an innovative programme that implements government policy on social inclusion through education. The lessons learned from the case study inform both theory and practice and illustrate that providing IT-based education for the socially excluded requires significant commitments to action by all concerned over lengthy time horizons.

Keywords: Digital Divide, Institutional Theory, Commitment, Education, IT

Résumé

Cet article utilise la théorie institutionnelle dans le but d'aider à comprendre les influences régulatrices, normatives, culturelles et cognitives qui sous-tendent les politiques qui ont visées à élargir la participation à la formation aux TIC. Il emploie aussi cette théorie pour explorer l'implication des acteurs sociaux dans la mise en pratique des politiques managériales de l'entreprise.

Introduction

The conceptual origins of social exclusion are to be found in France during the 1960s with institutional responses to address the problems faced by 'les exclus'—the socio-economically disadvantaged (Burchardt, Le Grand, and Piachaud 2002). Since then, social exclusion developed into a multidimensional concept that has been the subject of much debate in the sciences; however, it is now generally accepted to refer to the exclusion of citizens from 'normal' educational, economic, social and political activities (Percy-Smith 2000; Hills, Le Grand, and Piachaud 2002). There are two fundamental perspectives underpinning extant conceptualizations of social exclusion: one places responsibility on the excluded citizen for failing to participate in social, educational, economic and political activities, while the other argues that it is social structures which prevent citizens from realizing their potential and

fully engaging in society (cf. Veit-Wilson 1998)—the latter perspective informs the present study. While the concept of social exclusion describes a particular state of affairs for those on the margins of society, the related concept of social inclusion concerns itself with the policies and initiatives required to enable ‘les exclus’ to engage in social, educational, economic, and political activities (Hills et al. 2002). Economic policy is a well-established mechanism for addressing the problem of social exclusion (Veit-Wilson 1998); however, education has been posited as a particularly influential instrument in promoting social inclusion (Milbourne 2002; Dunne 2002; OECD 2004). In a broader institutional context, social inclusion emerged as a fundamental part of the European Union’s (EU) strategy of becoming a knowledge-based economy (European Commission 2001). Information technology (IT) was recognized as being an important enabler in this process and thus the related concept of e-inclusion emerged (Cullen, Hadjirassilion, Junge and Fischer 2006)—significantly, training and education were identified as important elements in this process. Training issues aside, the topic of IT education was conspicuous by its absence in papers published in the proceedings of the IFIP TC WG 8.2 Working Conference in 2006, where the implications of social inclusion for the IS field were considered (Trauth, Howcroft, Butler, Fitzgerald, and DeGross 2006). This paper therefore addresses this lacuna by employing institutional theory to examine the role of education in promoting social inclusion. As a point of departure, we define social inclusion as the improvement of the social and economic standing, life-chances, and so on, of adult unemployed or underemployed—or their offspring—the disabled, lone parents, and others of a similar socioeconomic disposition, through access to higher or further education, or through the provision of vocational or occupational training.

It is widely recognised that the existence of a highly educated workforce is one of key determinants of the Irish economy’s success (Enterprise Strategy Group 2004; Friedman 2005). The OECD (2004, p. 8) in its report on higher education in Ireland pointed out that “Ireland’s remarkable economic growth averaging over 9% per annum from 1997 to 2000 inclusive is seen as being fuelled by the expansion in the output of high quality graduates in the labour market.” Simulated by the existence of highly educated IT graduates and post-graduates, the Irish IT sector is particularly noteworthy in its contribution to Ireland’s economic performance (Cusumano 2005). In the mid-1990s, the Irish labour force did not contain sufficient educated or skilled workers to meet the growing needs of the IT industry. The government response was to institute a number of initiatives aimed at fostering growth in tertiary or further and higher education, in addition to vocational and training programmes, the purpose of which was to meet the growing shortfall in IT-based skills. It was not content though to leave to chance, or the vagaries of the market, the fate of socially disadvantaged groups, as “[t]ackling social exclusion through education, achieving equity of educational opportunity, establishing lifelong learning routes” were, by then, national policy priorities (HEA, 2004a, p. 9). Thus the Irish Government sought to increase participation in tertiary or third level education by those with disabilities, from disadvantaged backgrounds, or who were mature ‘second chance’ students (Phillips and Eustace 2005): those that did not seek further or higher education were targeted by general skills and training initiatives (McIver Consulting 2004). It is widely acknowledged, however, that such initiatives were only partially successful; hence, it is argued that there is a need to understand why considerable human, infrastructural, and financial resources are not being used to their greatest effect (HEA, 2004a). This paper therefore aims to deepen the IS field’s understanding of the institutional challenges in implementing policies aimed at promoting social inclusion through the provision of IT-based education and training. The study achieves this by conducting an institutional analysis of the Irish education sector and a longitudinal study of an innovative programme that implements government policy on social inclusion.

The remainder of the paper is structured as follows: Section 2 presents this paper’s theoretical perspective by drawing on both new and old institutional theory. Drawing on Scott (2001) and DiMaggio and Powell (1983) it postulates that regulative (coercive), normative, and cultural-cognitive (mimetic) influences responses from organisations in the form of new programmes, procedures and protocols. The paper then revisits the work of Selznick (1949, 1957) in order to help explain how institutional influences shape the commitments of organisational actors, and how they in turn result in the particular organisational outcomes observed. Section 3 describes the study’s research approach, which entails an 8 year longitudinal case study of the Irish educational sector and the embedded unit of analysis, which is a programme aimed at providing university-level IT-based education to socially disadvantaged and excluded people. Section 4 describes the institutional environment and organisational field at the level of the case, as well as institutional responses to environmental influences. An understanding of this institutional matrix and its policy instruments is required if this study is to “uncover systematically the sources of unanticipated consequences in purposive action” (Selznick, 1949, p. 254). Section 5 presents a longitudinal analysis of the embedded unit of analysis, a programme aimed at social inclusion in and through IT-based education, which was an organisational response to influences from the institutional environment. Finally, Section 6 discusses the findings and offers this paper’s conclusions.

Institutional Theory as a Theoretical Lens

Institutional theory has been applied by IS researchers to investigate a range of organisational phenomena (see, for examples, Noir and Walsham 2007). Douglass North (1991, p. 97) defines institutions as “the humanly devised constraints that structure political, economic, and social interactions. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).” It is clear from DiMaggio and Powell (1983), as with Scott (2001), that the institutional environment (as structured by regulative, normative and cultural-cognitive influences) shapes an organisational field and exerts a significant influence over an organisation’s structures, policies, practices, and procedures. According to DiMaggio and Powell (1983, p. 143), an organisational field is comprised of “[t]hose organisations that, in the aggregate, constitute a recognized area of institutional life: [it consists of] key suppliers, resource and product consumers, regulatory agencies, and other organisations that produce similar services or products.” An ‘organisational field’ is characterized by coercive (regulative and legislative) influences from government departments, state-sponsored agencies, the judiciary, and so on, in addition to normative and mimetic (cultural-cognitive—Scott, 2001) influences from related organisations (non-government organisations (NGOs), consulting organisations, professional bodies, etc.), and society at large (NGOs and community groups, for examples) and other related social entities. Following Chiasson and Davidson (2005), this study conceptualizes an organisational field as being constituted by related organisational populations each with their immediate organisational environment. Furthermore, Scott (2001) illustrates that organisations respond to regulatory, normative and cultural-cognitive environmental influences by instituting policies, procedures and protocols.

Drawing on Scott (2001), the *emphasis* of regulatory institutional influences is on coercion, indicators of which are rules and laws, which agents such as governments and regulatory agencies legitimize using legal mechanisms or sanctions to ensure compliance. Institutional *carriers*, on the other hand, are social structures such as governance and power systems, which institute rules and laws, the organisational response to which is to institutionalize routines such as protocols and procedures. Hence, there is a need to focus upon governance power systems, rules, and laws that shape corresponding organisational procedures and protocols. Scott (2001) argues that the *emphasis* of normative influences is on social obligation as a basis of compliance and whose basis for *legitimacy* is moral governance. The institutional *carriers* of normative influences are the values and expectations that inhere in (a) cultures; (b) social structures that impose authority systems; and (c) routines that reflect conformance and performance of duty. Cultural-cognitive influences emphasize compliance as been ‘taken for granted’, where mimetic mechanisms are at play, with a logic of orthodoxy. *Carriers*, on the other hand, include: (a) socially constructed cultural categories and typifications; (b) social structures that result in isomorphism; and (c) routines that are reflected in performance programs and scripts.

Philip Selznick (1949), in his groundbreaking case study of the *Tennessee Valley Authority*, first described how, in implementing government policy, institutions could be socially constructed through cooptation and the commitments entered into by a variety of stakeholders and social actors, some of which resulted in unintended consequences. Thus, agency plays major role in shaping the institutional environment. Borum and Westenholtz (1994), for example, focus on the role of actors in shaping the development of Copenhagen Business School (CBS) (cf. Scott 2001). According to Borum and Westenholtz (1994, p. 113) “[a]ctors are perceived as being “equipped” with socially constructed goals/interests and cognitive schemata...[in] pursuing their interests, they select and promote organisational forms, rules, and procedures, marshalling them to their support. To promote their own interests, such organisational actors may fight for change by linking up with other segments of the given [organisational] field, or they may fight for stability by linking up with others segments of the field.” It is clear that this conceptualisation finds its roots in the work of Selznick. For example, Selznick’s (1949, pp. 258-259) posits that: “The systematized commitments of an organisation define its character. Day-to-day decision, relevant to the actual problems met in the translation of policy into action, create precedents, alliances, effective symbols, and personal loyalties which transform the organisation from a profane, manipulable instrument into something having a sacred status and thus resistant to treatment simply as a means to some external goal.” However, Selznick (1957, p.143) warns against institutional actors taking a purely ‘technical’ approach to policymaking and execution that involves “the pursuit of immediate short-run advantages in a way inadequately controlled by considerations of principle and ultimate consequences.” This lies in direct contrast to an institutional approach to leadership that (ibid.) “look[s] to the long-run...and how changes effect personal or institutional identity.”

Selznick’s conceptual schema provides this paper with its theoretical lens, as it operates at a suitable level of granularity to examine the phenomena of interest (cf. Knudsen 1994). Selznick (1949) illustrates that ‘commitment’

is an ‘enforced’ component of social action: it refers to the binding (through, for examples, formal or informal cooptation) of an individual or group of individuals to particular behavioural acts in the pursuit of institutional imperatives, organisational objectives, and sectional interests. It is clear from Selznick that the locus of commitment and its enforcement varies from the individual in certain circumstances, to social groupings, to the organisation of which they are members, and to the agencies constituting the institutional matrix in which an organisation is embedded. Finally, a sensitive reading of Selznick’s institutional perspective illustrates that it reflects both normative and cultural-cognitive influences that shape organisational responses in the form of policies, procedures and protocols. Thus, we argue that his theoretical framework is an appropriate theoretical lens for this study. Selznick (ibid.) delineates several types of commitment; these are illustrated in Table 1.

Table 1 Commitments as Influences on Institutional Policy Formation and Implementation (Adapted from Selznick 1949)	
Type of Commitment	Description
Commitments enforced by uniquely organisational imperatives.	Institutional imperatives are concerned with 'reality' maintenance and are usually implemented by policy decisions.
Commitments enforced by the social character of the personnel.	Institutional stakeholders and social actors possess particular needs, levels of aspiration, education, social ideals and class interests; all of which influences the formation and implementation of institutional policy.
Commitments enforced by institutionalization.	Because institutions are social systems, goals, policies or procedures tend to achieve an established, value-impregnated status. Commitment to established or institutionalized patterns is thereby accomplished, restricting choice and enforcing specific behavioural standards.
Commitments enforced by the social and cultural environment.	Institutional policies and outcomes are often influenced and shaped by stakeholder and social actors in the external social and cultural environment.
Commitments enforced by the centers of interest generated in the course of action.	Decentralization and delegation of decision making to particular individuals and institutional groupings runs the risk that policies and programmes, influenced by the tangential informal goals of these individuals and sectional interests, and which are unanticipated and incongruent with those of the wider institutional matrix, will be entered into.

Research Methodology

A qualitative, interpretive, case-based research strategy was adopted, using a single embedded unit of analysis (see Yin 2003; Walsham 1995). Stake (1995) contends that an instrumental case study is one where the case forms a backdrop or context and is of secondary importance. Such a study is undertaken to build or extend a theory or to explore a particular phenomenon as it is manifested in the case—that is the approach adopted in the present study. The case in question is the Irish educational sector and the embedded unit of analysis is a non-government jointly-administered educational initiative by a university, an institute of technology and an NGO (a state-funded Area Partnership Company). The case and the embedded unit was studied longitudinally over an 8 year period, beginning in 1999 to the present. The researchers played an active role in all aspects of the establishment of the educational initiative and in the delivery of the educational programme. In this capacity they were both ‘fly-on-the-wall’ and active participants at all key stages (cf. Yin 2003). Participant observation was a key data gathering approach (Yin 2003; Jorgensen 1989), while extensive case and field notes were taken on all meetings, informal conversations and observations (Ezey 2003). Over the 8 year period, the researchers gathered data from in excess of 70 participants (members of government departments, agencies, NGOs, community groups, IT organisations, universities and institutes) from the organisational field of interest. Of this there was a core group of between 10-12 individuals from several institutions who constituted the steering committee for the embedded unit of analysis and which met on a bi-monthly basis. In addition, there were a number of sub-committees that met on a regular basis around key issues,

such as student recruitment and so on. A wealth of documentary evidence was also gathered. Following Yin (2003), an analytic generalization strategy was adopted which applied theoretical concepts to interpret the data. Thus, the data analysis was informed by institutional theory and this allowed the different themes, categories and patterns to be identified in the data (Yin 2003). The data was coded using a scheme based on the seed-categories suggested by a-priori concepts from institutional theory, combined with open, axial and selective coding, which helped identify and elaborate additional themes/categories in the data (Strauss and Corbin 1990).

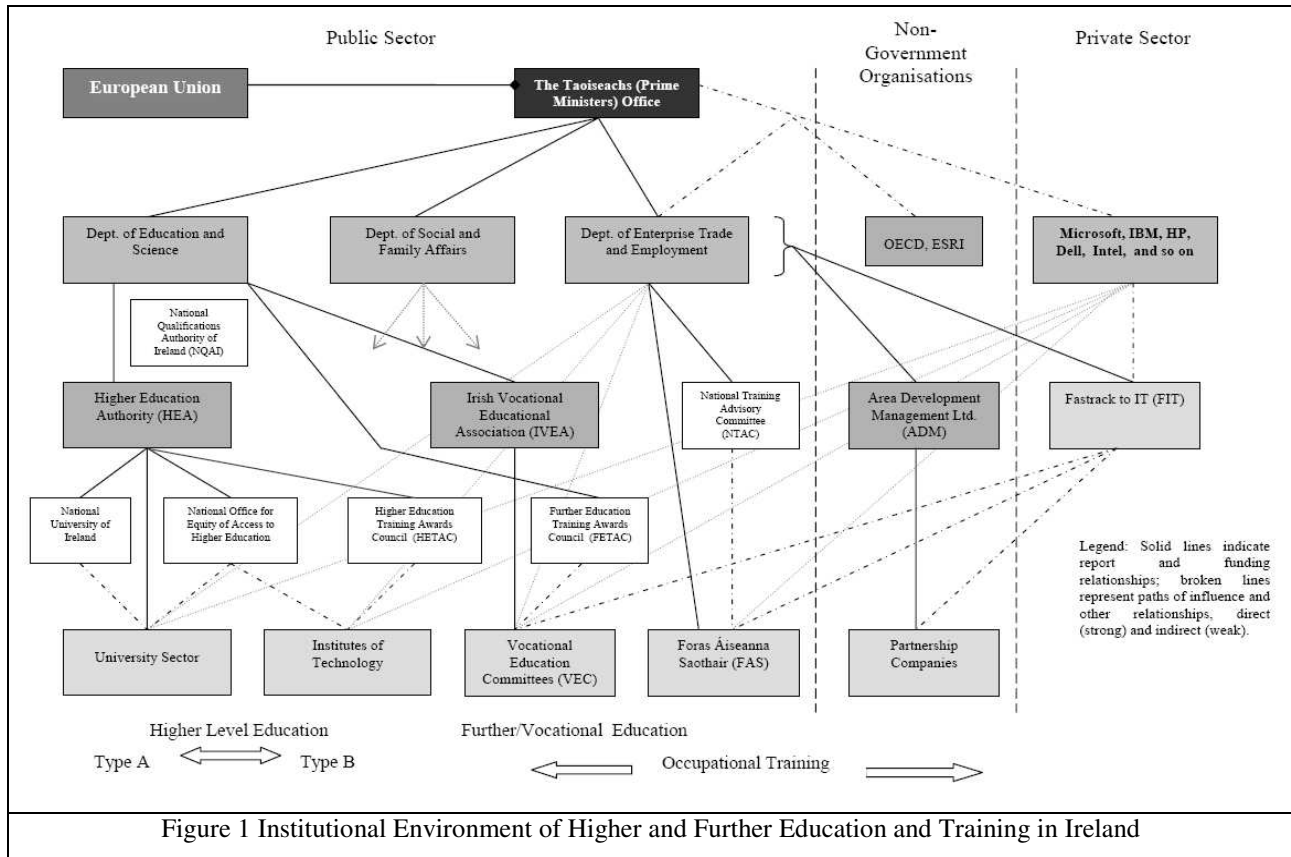
The Institutional Environment and Organisational Field: Regulatory, Normative and Cultural-Cognitive Influences on Social Inclusion in IT Education

It is now the conventional wisdom among Irish politicians, social partners, government agencies, and so on, that education is the only enduring and successful means by which the cycle of disadvantage can be broken. Take for example, the finding that educated workers in Ireland have achieved personal returns for each year of schooling of between 11% and 14%, for male and females respectively on the investment in their education (Harmon and Walker 2004). The returns on investment in education are not only economic, however, as benefits are argued to accrue to society as a whole, in terms of reduced crime levels, the general health of the populace, increased family stability, and other improvements to society (Harmon and Walker 2004; OECD 2004). Thus, being educated not only increases the probability of obtaining a job, it also guarantees higher levels of remuneration—this is especially true for graduates of tertiary institutions, such as universities, institutes of technology, and so on. The introduction in Ireland of free second level education in the 1960s, third level student grant schemes in 1968, and universal free (i.e. state funded) further and higher education in 1996 were attempts to provide equal opportunity of access for all socio-economic groups in Irish society to universities and other higher institutions of learning. The reality, as Clancy and Wall (2000) illustrate, is that participation in tertiary education is still skewed heavily toward the professional and middle classes. For example, they found that 58% of entrants to tertiary education came from the higher and lower professional, employer, managerial, and farming socio-economic groups, which together constitute just 37% of the population. This is to be contrasted with participation rates from the remaining 63% which make up just 41% of entrants to tertiary institutions—thus, there remains a clear need for greater social inclusion in Irish tertiary education. This section provides an understanding of influences from the institutional environment that generated responses to this need and shaped policymaking on social inclusion in and through education in Ireland. First described is the institutional structure of the organisational field; following this, the forces that shaped the field's institutional environment are described; finally, an institutional response to these forces is outlined which exerted commitment-reinforcing normative influences on social actors in key government departments and agencies.

The Organisational Field of Irish Education and Training

Figure 1 presents an overview of the structure of the institutional environment in which IT education and training takes place in Ireland. The organisational field or institutional matrix in which post-second level education and training takes place in Ireland is complex—despite the fact that the state is in the driving seat. In his seminal history of 20th century Ireland, Lee (1989, p. 558) notes that “The quality of the official mind is now probably exerting an even greater influence than heretofore on the quality of national life, if only because the role of the state has so greatly expanded since 1960”. However, from the late 1980s, wider cultural cognitive influences were exerted through national Social Partnership Agreements with employers, trades unions, and a plethora of non-government organisations (e.g. Poverty Action Ireland etc.). Nevertheless, Lee's observation supports the contention that policy making in relation to education in Ireland is government led; hence, regulatory influences are primary in shaping the institutional environment. High-level policy making with respect to regulatory instruments originate in the Taoiseach's (Prime Minister's) Department. The Irish Government does not, however, operate in an institutional vacuum—its 'organisational field' shaped by the European Union (EU), social partners, various organisations, and the nation's citizens. Down from the Department of Taoiseach are the three government departments who have a role to play in policy formulation around, and the delivery of, further and higher education and training in the Ireland. The Department of Education and Science has the primary responsibility for the formation and implementation of policy and funding provision for primary, secondary and higher or tertiary education, including research; the Department of Social and Family Affairs' interest in the education and training sectors is through the provision of support and funding for the disadvantaged, those with disabilities, and others seeking further education and training (subject to budgetary constraints imposed by the Department of Finance); the Department of Enterprise Trade and Employment's interest in this area is in the provision of funding for training and research. The essential

point here is that institutional theory would predict that to achieve optimal results in terms of policy implementation around social inclusion in education, the commitments of “official mind[s]” across all relevant departments should unambiguously and unanimously aligned with stated government policy. Following Selznick (1949), it is evident that while social actors in each relevant government department and related agencies will be influenced by chiefly regulative and normative influences to align their commitments in line with overarching government policies, they will, however, also possess commitments that are sectional and local, i.e. “generated in the course of action” centered on fulfilling departmental policies.



The statutory body charged with implementing policy on tertiary education is the Higher Education Authority (HEA). It funds the university sector and institutes of technology through the Higher Education and Training Awards Council (HETAC), which is the qualifications awarding body for the institutes of technology and other non-university higher education colleges and institutions. Ireland’s seven universities deliver Type A tertiary education, while its thirteen institutes of technology deliver Type B programmes. The Further Education Training and Awards Council (FETAC) is the body responsible for the system of qualifications for the further education and training sector. Vocational Educational Committee (VEC) teaching institutions and FÁS (the national training agency) training centres delivery FETAC Level programmes and modules nationwide.

In a broader institutional context, the EU through its policy directives and regulations provides the regulatory context and direction for government legislation and the delivery of EU-funded services. For example, the Area Development Management (ADM) Limited (Ltd.) company is a state-funded agency established by agreement between the European Union and the Irish government as an intermediary company to manage EU and government grants, in addition to exchequer resources of a general nature, to help in tackle long term unemployment, economic marginalization, and social exclusion in Ireland. In this role, ADM helped establish and fund 38 Area-based Partnership Companies and 32 Community Partnership Companies in pursuit of its mandate to help implement government policy. Partnership Companies helps administer The Millennium Partnership Fund for Disadvantage: Access to Third Level Education, and play a variety of roles in the local communities by coordinating basic training

(e.g. European Computer Driving License (ECDL) course) and other services for the socially excluded and the disadvantaged. These organisations are therefore in the front line of social inclusion initiatives.

Formative Forces Shaping Social Inclusion in and through Education in Ireland

In 1993, Ireland like most European countries was in the grip of an economic downturn. This had persisted throughout the 1980's, when the country saw much of its talented educated citizens emigrate to find employment. That year was, in many respects, a turning point, due to changes to the country's institutional environment. The Single European Market was introduced in 1993, and this effectively opened up the European market and made doing business across EU Member States much easier—this was an important development, as many US multinationals saw Ireland as their European base of choice. Cusumano (2005 p. 25) reports that since the 1970s the Irish Government had been promoting Ireland to U.S. companies “as a base for localizing their products for the European market. In addition to Microsoft, early investors included Lotus and Digital Equipment Corporation. They were followed by Oracle, Novell, Informix, EDS, and SAP, and hardware or systems companies such as Dell, Sun Microsystems, Motorola, Ericsson, and Nortel.” Thus, an upswing in Foreign Direct Investment during the 1990s meant that the information and communication technologies (ICT) sector would play a pivotal role in Ireland's future and thus be a source of employment for Ireland's educated and up-skilled workforce (Forfás 1996). During 1997 and 1998, for example, the influx of new US multinationals, the expansion of established organisations—national and international—and the upsurge in small-to-medium software and technology enterprises increased the demand for workers with IT knowledge and skill at all levels—from technical support operatives to software engineers (cf. Cusumano 2005). ICT firms were not passive participants, however, they played an active role in shaping the institutional environment in further and higher education through contacts with the Department of Enterprise, Trade and Employment, the universities and institutes of technology, and, also, the Taoiseach's office. In terms of social inclusion in and through education, the HEA (2004b, p. 15) reports that “[a]chieving an equitable education system has been a priority for the state in recent years and has been clearly articulated in Government White Papers” during the 1990s. Consequently, the government decided that the socially excluded were not going to be left behind, as inclusivity in education and training was identified as being vital in ensuring Ireland's success in adapting to a globalised environment (Department of Enterprise, Trade and Employment 1997; HEA 2004b). In terms of institutional theory, while regulative influences from the Irish government's wider institutional environment, in the form of EU policy and funding, shaped its responses, so too did normative influences from the likes of the OECD. Normative influences were also brought to bear by ICT multinationals who wished to expand their Irish operations, while cultural-cognitive forces from social partner organisations and NGOs emphasized social inclusion through education and the avoidance of a ‘digital divide’.

Institutional Responses to Environmental Influences

Public institutions are not known for their alacrity in responding to societal needs—this is also true of educational organisations such as universities (cf. OECD 2004). Hence, one of the first responses at national level was industry driven and led. In 1997, the growing IT skills gap led major national and international ICT firms to take the initiative. Thus, a new institutional entity, the Fastrack to IT (FIT) Working Group was established 1998 by a loose association of ICT firms, with the assistance of a state agency, the Industrial Development Authority, and the support of the Taoiseach's Department. This public-private partnership initially involved ICT organisations such as Corel, CSC, IBM, Microsoft, Oracle, and Symantec from the private sector and public sector organisations such as the Industrial Development Authority (IDA), the Department of Enterprise, Trade and Employment, the Department of Education and Science, and the Ballymun Job Centre (an ADM-funded institution). The organisations exerted normative influences on social actors in government, from the Taoiseach down to ministers in key departments, to executives in state agencies, which led to the Selznickian ‘cooptation’ of otherwise recalcitrant government education and training agencies, such as FÁS and Vocational Education Committee (VEC) institutions (cf. Selznick 1949). Selznick (1949, p. 13) defines cooptation as “the process of absorbing new elements into the leadership or policy determining structure of an organization as a means of averting threats to its stability or existence”. For the purpose of this study, cooptation, whether formal or informal, refers to the ways in which ‘commitments’ to organisational imperatives and ends are secured through inter-organisational collaborations with institutional entities and groups that control resources critical to the coopting organisation (cf. Hillman, Zardkoohi and Bierman 1999). Hillman et al. (1999) notes that linkages between business enterprises and governments are often established so that

firms can access public resources which they need to fulfil their commercial objectives—this was the case with the FIT initiative.

Thus, the FIT Action Plan was launched by the Taoiseach on the 31st of March 1999. This incorporated FIT as a limited company, whose Executive Committee was, and still is, constituted by representatives from industry in the main. The FIT Curriculum Sub-group was instituted as a cooptative mechanism to incorporate into FIT representatives of Local Employment Services/ADM Partnership Companies, FÁS, VECs, and the Department of Social and Family Affairs. This collaborative entity was, therefore, instituted to establish and maintain commitment-generating normative ‘cooptative’ influences and to coordinate resource allocations at regional and local levels. It also served as a means to socially construct the FIT ‘character’ by establishing identity-shaping commitments among social actors (cf. Selznick 1949, 1957). FIT’s *raison d’être* or institutional ‘character’ was quickly established, in that it was promoted as enabling socially excluded job seekers to access quality IT training, in preparation for employment opportunities across industry. The fact that it also serviced the skills needs of ICT firms was the latent rationale for its existence. Nevertheless, it achieved its manifest purpose as through FIT, the long-term unemployed, lone parents, and young school-leavers were facilitated to secure work as computer professionals in large corporations. The companies presently leading FIT now include AIB, Alchemy Software Development, Connect Global Solutions, Creative, CSC, Danone, Dell, Eircom, Esat BT, Hewlett Packard, IBM, IBEC, Microsoft, Modus Media, Obair, America Online, Oracle, Pivotal, Price Waterhouse Coopers, SkillsSoft, Symantec, and Vistatec. As an industry-oriented training entity, FIT organizes training courses in Technical Support, Quality Assurance, PC Maintenance and Servicing, Localisation, Programming, Microsoft Certified Professional Courses, and E-commerce Web Design. These programmes are delivered at coopted organisations such as FÁS Training Centres, Vocational Education Committee institutions, and in the Ballymun Partnership Company (which was in the then Taoiseach’s electoral constituency, hence, his personal interest in, and support for, the initiative). FIT has also taken steps to facilitate Higher Education at tertiary level through its collaboration with Dublin City University and its distance learning Oscail programme. The object here is to provide opportunities for FIT Graduates to obtain a degree in Information Technology through DCU’s Oscail Lifelong Learning Programme. Finally, the FIT initiative was influential in adding a stimulus to other institutional responses, through a combination of normative and mimetic influences, as industry participants were particularly active in shaping government responses. For example, FÁS Training Centres and Vocational Education Committee community colleges began to introduce new or extend ICT-based education and training courses. This trend has continued apace since. Here, at least, the institutional imperative for life-long education and widening access to post-second level education and training was being addressed.

An Organisational Response to Influences from the Institutional Environment: The Embedded Unit of Analysis

Universities and institutes of technology in Ireland make limited accommodation for socially excluded secondary or high-school students using the HEA-sponsored Third Level Access Fund. In addition, full-time programmes offered by these institutions usually have a small number of places allocated to mature students over 23 years of age. These positions are filled on a competitive basis, typically by interview, to suitably motivated and qualified candidates, irrespective of socio-economic status—accordingly, socially excluded adults rarely gain entry to education through this route. Universities and institutes of technology also run special programmes to cater for adult and continuing education; typically, such courses are run on an evening, part-time basis, although the institutes of technology deliver full-time courses in this area. Significantly, many such programmes carry entry fees, which confer a significant obstacle to the socially disadvantaged, despite fee reductions (e.g. 30%) for certain categories of students. In the late 1990s, the HEA introduced targeted funding for initiatives aimed specifically at the socially excluded. The purpose of such initiatives is to broaden access from under-represented social groups to universities: these social groups include students from disadvantaged backgrounds, mature students, and members of the traveling community. As indicated by an OECD report (OECD 2004), such initiatives have been slow to come on-stream. This section evaluates the strengths and weaknesses of institutional policy and practice in the implementation of a HEA Targeted Initiative aimed at meeting Irish Government policy objectives with respect to social inclusion in tertiary education.

Generating Commitments to Action around Social Inclusion in ICT-based Higher Education

The analysis of the organisational field in the previous section revealed that while the higher education needs of children from socially excluded backgrounds are receiving a measure of institutional support, the needs of their parents and older siblings, who may have missed out on such opportunities, are not being met. Socially excluded mature and young adults are not participating in higher or further education through existing channels—this is especially true of IT-based programmes—due, as indicated, to restrictive and challenging entry requirements and/or procedures for entry. True, opportunities for low-level training exist, but only for the unemployed—the underemployed trapped in low-skilled jobs are simply out of the loop. That was the situation in 2000 and it still persists to this day (cf. OECD 2004).

In response to government policy and encouragement from the HEA, a Targeted Initiative called the Diploma in Applied Business Computing was established in Ireland's second city, Cork. The initial response originated in University College Cork's Business Information Systems (BIS) Group; however, just as with the FIT initiative, the principal social actors realized that they would have to coopt, in Selznickian terms, other institutional entities if they were to successfully meet the challenge. Thus, the BIS group formally coopted the key social actors from the university's Centre for Adult and Continuing Education, the Cork City (ADM) Partnership Company, and the Cork Institute of Technology. Informal cooptation of the area manager and staff from the Department of Social and Family Affairs and FÁS subsequently occurred. Thus, the university used formal and informal cooptation "to publicly absorb new elements" (Selznick, 1949, p. 13), as it did not have the full range of competencies to meet the particular challenges presented by such initiatives. The mechanism for formal cooptation was a joint entity called the Diploma Executive Steering Committee. This would provide a forum for planning and executing the programme—it would also act as a platform to build and maintain the programme through normative and cultural-cognitive mechanisms. Thus, in terms of normative mechanisms, committee meetings acted to normatively shape the commitments of the various professionals, academic and non-academic, and administrators from the university, the institute of technology and the Partnership Company. It must be noted, however, that high levels of commitment to the overarching policies of social inclusion in and through education were manifested by all parties and a consensus was quickly reached by all committee members on the direction the programme would take. The Selznickian character or identity of the programme was also socially constructed over time by the members of the committee through their commitments to action (cf. Selznick 1957; Zucker and Darby 2004).

From January to May of 2000, the steering committee grappled with several major issues: Where to locate the course—on-campus or off? How to acquire sufficient funding for setting up the program? And whether to restrict the student intake to those resident to one socially disadvantaged suburb—the 'Northside'? While the IR €75,000 funding that the HEA was willing to commit for an intake of 25 students would be theoretically sufficient to set up the course on-campus, there would be a problem with accommodation, as the university was suffering capacity constraints and could not commit to providing the dedicated resources required. The pros and cons of having the students on-campus were also debated at length by members of the committee. In the final analysis, events in the wider institutional environment—i.e. the government proposal to set up a 'Northside Campus' in response to a socially constructed need—had the committee opt for a location in this area. Between March and May, several potential sites were evaluated. It was decided to construct a computer laboratory, office space, and kitchen/dining area in a Northside Business Park (Again informal cooptation was employed to obtain a discount on the lease from the building's owners.) Funding now became the critical issue; it was fortunate then that a link was made, however tenuous, with the politically sensitive 'Northside Campus'. The existence of the diploma was now seen as being vital for introduction of the 'Northside Campus,' and its enhanced status brought with it financial help from an unexpected source. An 'anonymous donor' and philanthropist pledged IR €100,000 (approx €127,000) to help establish the learning centre. Some IR€175,000 (€227,000) of funding was now in place—nevertheless, committee members regarded as being insufficient for a green-field startup. Further funds would not be forthcoming from the HEA, and both the university and the institute of technology were not in a position to provide capital funds. A chance conversation (by the first author) with the course director had a senior official from the government Department of Social Community and Family Affairs pledge IR €40,000 (€50,000) to fully equip the centre with workstations, servers, and networking equipment.

The authors of this paper played lead roles in the initiatives' steering committee in terms of the formulation of policy and the practical implementation and day-to-day running of the programme. For example, one of them acted as project manager for the building and equipping of the new facility in 2000. They also designed the curriculum with the needs of both academia and industry in mind and to maximize graduates' job opportunities. However, one of

their key concerns was the selection of students and in matching the course content with the educational competencies of target constituency. Then there were the issues of problems that might be encountered in dealing with students with particular educational needs. Hence, in finalizing the design of the programme, one of the researchers conducted field research on the FIT initiative at several sites in Dublin—this was a classic example of ‘mimetic’ behaviour (cf. DiMaggio and Powell 1983). Here key players were interviewed in FIT at two educational centres—the FIT centre in Ballymun and at a local VEC. As stated, the purpose of this exercise was to obtain insights into the challenges faced by administrators, educators and students alike and to learn from their experiences in arriving at practical solutions.

While the FIT model was not adopted, the idea of industry participation did merit further consideration. As indicated, ICT organisations take a lead role in the governance of the FIT initiative and commit to employing FIT graduates. The researchers concluded that the exercise of corporate social responsibility might help overcome some of the challenges presented to the nascent targeted initiative. For example, due to the increased demand for IT-related courses in the university, the necessary numbers of academic staff were not available to deliver the course. Thus, the type of cooptation noted by Hillman et al. (1999) occurred in reverse in that a public institution, the Diploma Executive Steering Committee, formed linkages with business enterprises to access private resources in order to fulfil the objectives of public policy. Thus, during February and March of 2000 various players in the IT industry were canvassed and asked if they wished to exercise corporate social responsibility by sponsoring the program—this was an effective form of informal cooptation.

Another issue faced by the course coordinator was that due to the limited financial support provided to set up the course, funding and/or support in the provision of training materials would need to be secured. Accordingly, direct and indirect contact was initiated with several national and multinational companies in the IT sector. Many e-mails, lengthy international telephone calls, and several business meetings later, significant levels of support were obtained. Consequently, Microsoft Corporation supplied courseware from the IT Architectures and Visual Programming modules gratis for the students. Microsoft also initiated contact with Cara Training, the largest of the Irish companies delivering Microsoft certified training for the IT industry at the time. In an excellent example of cooptation and corporate social responsibility at work, Cara acted as a channel for Microsoft and handled the delivery of the courseware. More significantly, however, Cara agreed to participate in delivering the IT Architectures module. They also provided such services as setting up the laboratory network and laboratory server. Oracle Corporation provided two copies of their enterprise database platform Oracle 8i, in addition to permission to copy and distribute Oracle Personal Edition to students: they also undertook to provide course ware, if required. Motorola was also approached, as it then had a significant presence in the region. Motorola’s head of operations indicated that he would provide up to four IT professionals to teach into the course. Eircom, Ireland’s largest telecommunications operator, as with Motorola, were willing to provide competent IT professionals to help deliver the program. Finally, FÁS, the national training agency, provided an experienced MCSE qualified trainer.

The initial curriculum for the programme was fleshed out in collaboration with coopted IT professionals and with reference to the content of certain FIT courses. The Diploma programme was to be run in two-year, non-overlapping cycles. The core IT modules delivered in 2000-2006 were: IT administration and technical support; database design and development; programming; web design and development and principles of business information systems. The heavy industry focus was evident in that the courses included Windows 2000 Professional and Server client/server operating systems and internetworking; Oracle database design and development; Visual Basic programming (now VB.Net); and the development of multimedia systems for the Internet (using Macromedia’s Dreamweaver and Director, Photoshop, HTML, and Java-Script programming). In 2006, Economics and Accounting modules were also introduced to provide additional ladders of progression for student to degree-level education. However, social actors’ commitments to building the programme did not end here, as will be seen.

The experience of practitioners from the FIT initiative and practitioners from the Partnership Company indicated that socially and economically disadvantaged mature students come with different problems and needs to conventional students, mature or otherwise. For example, it was expected that some students would present with partnership/marital problems, others with alcohol and substance abuse issues, and some would be afflicted by various forms of physical disability or psychological issues. It was recognized early on that these needs would have to be met and catered for, if students were to sustain commitment to what is a significant educational undertaking. Thus, the successful operation of the programme would require significant commitments from both academic staff and the guest lecturers from industry. However, they and their students would need support from appropriately trained support staff—which the university did not then have. Hence support team members consisting of three social workers from the Partnership Company and a counseling psychologist from the institute of technology were

coopted into the programme. The support team was to play a key role in the induction course, the purpose of which was for to provide students with information and advice on the various support structures and funds available to them. The majority of students, particularly those with families for example, were dependent on the Back to Education Allowance (BTEA) to fund their living expenses while on the course. Having the Department of Social and Family Affairs coopted onto the initiative helped greatly in dealing with student issues in relation to this area of funding. Likewise, support staff and the course coordinator helped remove obstacles to, and advised students on, the attainment of Higher Education Maintenance and other grants. Thus in the first three months of each cycle, support staff attended at fixed times each day to help students with issues of a personal or financial nature that might negatively influence their academic performance or threaten their commitment to continue with the course. This approach helped the majority of students settle into the academic routine without funding or other concerns interfering with their learning.

Maintaining Commitments to Institutional Imperatives

The first two years of the programme’s existence (2000-2002) saw considerable support from coopted private sector organisations, with staff from FÁS, Motorola, eircom and Cara Training teaching into the inaugural cycle of the course, while Microsoft and Oracle provided teaching materials and software. Accordingly, the high levels of commitment by all participating social actors saw the first cycle of the course achieve one of the highest retention rates of any IT course of its type in the higher education sector—this was even more significant given the type of student enrolled (average age 28) with a 50:50 male/female split (see Table 2). The latter was especially significant given the male dominated nature of IT courses. More significant, however, was the number and range of personal problems (lone parents), physical and psychiatric/psychological disabilities etc. among the students (this was true of all intakes, and needs to borne in mind when undertaking such programmes). The commitments of students (and their families/partners), academic and support staff (social workers etc.) all coalesced to make the first cycle of the programme a success, as 24 students graduated with a Diploma in Applied Business Computing in 2002.

Year	Admitted	Completed	Ratio Male/Female
2000-2001	28	24	14M:14F
2001-2002		24	
2002-2003	22	16	14M:8F
2003-2004		16	
2004-2005	18(14)	14	12M:6F
2005-2006		12	
2006-2007	24	16	19M:5F
2007-2008	16	10	

Things began to change, however, beginning with the dot.com crash and the downturn in the IT sector. The relatively brief IT downturn saw the gradual withdrawal of corporate support for the programme and by 2004 all participating companies had withdrawn support. It was also disappointing that with one exception, Cara Training Ltd., none of the organisations committed to providing work experience for students or employment on graduation. However, it was fortunate that there had been an uptake in the recruitment of lecturers at the university and the institute of technology, thereby making suitably qualified staff available to teach into the course and fill what was a considerable gap. The change in commitment of the aforementioned coopted private sector organisations is a form of deinstitutionalization (cf. DiMaggio 1988). Scott (2001, p. 49) points out that “the maintenance of institutions requires active effort”. Exogenous forces in the institutional environment aside, perhaps the course coordinator should have expended more “active effort” in commitment maintenance and should not have relied too much on the continued exercise of corporate social responsibility by these coopted organisations to frame commitments to the programme. In contrast, however, the government Department of Social and Family Affairs not only funded the

initial purchase of all computers and networking equipment for the facility, they maintained that commitment in subsequent years as new equipment had to be purchased for capital maintenance purposes.

Little could be done however about the Department of Social and Family Affairs' funding for students. If a student qualified for Back to Education Allowance (BTEA) from this department, then other funds such as Higher Education Maintenance Grants tended to fall into place. In 2002, the Irish economy shrank contracted in line with global trends following 9/11 and the busting of the Dotcom bubble. Government spending was cut, in line with shrinking tax revenues, and entitlements to BTEA tightened. Problems therefore arose with recently unemployed or disabled who failed to meet tighter requirements: e.g. they had to be unemployed for a set length of time to qualify for financial support. In the 2002, several students were affected by this, and declined the offer of a place, returning to the unemployment queue. Surprisingly, three students who did not receive BTEA decided to join the course and were provided with modest assistance by the Student Assistance (or Hardship) and Millennium funds from the university. Such problems were to come back to haunt the programme in subsequent cycles as BTEA requirements become more restrictive. Lengthening dole queues in 2007/2008, however, had the Department of Social and Family Affairs loosen requirements; nevertheless, by August 2008 with the drastic fall in government revenues, budgets were again tightened in the face of recession. Thus, committed as local government civil servants are to the programme, their hands are tied when it comes to policy decisions made at cabinet level.

Several exogenous factors influenced the size of the pool of students available for the second and subsequent cycles. Recent data from the Live Register reveals that the Unemployment Rates for 2000-2006 were 4.2%,-4.5% (5.6% in mid-2008). Thus the overall pool seems to be at the same level as it was in 2000. Added to this should be the number of women on Lone Parents Allowance and those on Disability Benefits, both of which increased in number. It is difficult to say with certainty what the underlying cause was, and still is, but there is a falling trend in numbers being admitted to and completing the course. Taking 2002/2004, for example, the canvassing of potential students by community-based organisations began later than that in 2000 with disappoint results in student numbers. This was due to a certain degree of 'resting upon laurels' rather than a lack of commitment on behalf of social actors—Scott's (2001) observation on 'active effort' seems also applicable here. However, much effort was expended in 2004/2006, by virtue of aggressive schedules being set for the promotion and recruitment of students by the Diploma Steering Committee. Unfortunately, the numbers accepted onto the programme in both cycles were not of the same overall quality as in the first cycle, as students had difficulty in meeting basic acceptance criteria. One reason for reduction in the pool of suitable applicants may be the increase in the range of IT-based courses being offered by community college type institutions run by FETAC (e.g. VECs and FÁS). In terms of institutional theory, this was perhaps a form of 'mimetic' isomorphism with respect to the FIT courses running in VEC and FÁS centres in Dublin, being extended countrywide. Here again the absence of a well-recognized socially-constructed identity for the diploma programme, and the high-profile identity of FETAC courses, meant that the former was, perhaps, losing out to the latter in attracting suitable students.

Unfortunately, the 2002-2006 cycles shared a common predicament with the first in that students possessed similar personal and other problems. The existence of such problems, coupled with the aforementioned contraction in funding, caused a number of dropouts over the first three cycles—the intake in the fourth cycle saw a worsening situation in this regard, with just 14 students failing or dropping out due to a range of personal, funding, and health problems. Also, in 2002-2006 cycles several students that would otherwise have not been admitted due to failure to meet basic acceptance criteria in the aptitude tests were admitted on other grounds (i.e. enthusiasm displayed at interviews) and, pragmatically, to maintain numbers. While the student intake in the first three cycles presented particular challenges, that for the 2006-2008 cycle proved particularly problematic—despite the ongoing high levels of commitment from academic and support staff to help students. On the plus side, the student profile began to map unto the changing landscape in the city due to the high levels of immigration, particularly participation by African refugees. On the minus side, socially excluded females were under-represented in this cohort. The latter could be explained, however, by the fact that employment growth among the female population was markedly higher in 2005 and 2006 than in previous years. Generally, however, the student intake was marred by a range of problems from personal and health issues to substance abuse, among other problems that beset the socially disadvantaged. The poor quality of the student intake could be explained, in part, by size of the pool (at 60 applicants, it was half the size of the number recorded in 2000) and the elimination of the aptitude test, which some members of the steering committee felt was too intimidating for people from disadvantaged backgrounds. The inclusion of the aptitude test in the selection process was a mimetic response, in that it was borrowed from the FIT programme (indeed in the first cycle, FIT personnel administered the test). While the exclusion of the aptitude test did not contribute to the selection of those with particular problems, it was evident that a number of students were experiencing significant

problems with the more challenging technical subjects like Windows 2003 Server, Oracle database and Visual Basic.Net. In contrast, the Web-design and Development and Business Information Systems modules proved accessible to most students, while anticipated student problems with the economics and accounting modules did not materialize. It was clear, however, that in keeping with the general diminution of effort and commitment to study currently being noted across tertiary institutions in Ireland, comparable problems were observed in otherwise intelligent students on the diploma course.

While lecturing in mainstream tertiary level courses demands high levels of commitment, as well as other important pedagogical skills, teaching classes constituted almost entirely by socially disadvantaged students with a whole range of often acute problems that hinder learning, and which often do not remain outside the classroom, involves the possession of commitments of a different nature. It is here that commitments enforced (a) by the social character of the personnel and (b) by the process of institutionalization in delivering such programmes come into play, as course coordinators and lecturers need to play the roles of mentor, counselor, agony aunt, and financial advisor, as needs arise.

Conclusions

This paper employs institutional theory in a case study of the organisational field of tertiary education in Ireland. It illustrates how the institutional environment shaped responses in public and private sector organisations on social inclusion in education and training. Significantly, the findings illustrate the Selznickian cooptation by private sector organisations, participating in the FIT initiative, of public sector organisations to achieve the objective of providing further education and training to build a much-needed resource of skilled IT recruits for industry. The embedded unit of analysis then explores the cooptation by a university of public and private sector organisations to implement an initiative whose purpose it was to give effect to government policy through social inclusion in tertiary IT education. The study employs Selznick's (1949) institutional theory to explain how commitments in the university and coopted organisations were fostered, aligned, and maintained. Table 3 presents an analysis of the commitments observed in the case's embedded unit of analysis—the Diploma in Applied Business Computing programme. It is significant that the commitments of key social actors in formally coopted organisations (i.e. the university, the institute of technology, and the partnership company) were well-aligned and persisted well across time. This was particularly true in the last cycle of the programme (2006-2008) when there were disappointing returns on what was a significant investment of time and resources in the programme. Thus the commitments presented in the table and described in the above case report indicate what is required to successfully implement and maintain such programmes. It is significant, however, that the institutional factors that threaten the programme (i.e. the commitments enforced by government departments as the centers of interest generated in the course of action) are outside the control of social actors implementing it.

Reflecting on this last point, it is noteworthy that a recent OECD (2004, p. 8) report indicated that “[I]f lifelong learning, widening participation and the encouragement of mature students to enter tertiary education have not been given such emphasis and must be reinforced in the future if Ireland is to capitalise on its success over the last decade.” Progress since 2004 has been glacial, as no further targeted initiatives have been introduced, and the institutional desire to widen participation by the socially included in tertiary education in Ireland remains an unachieved aspiration. Nevertheless, the commitments to social inclusion through education generated by organisational influences in Ireland endure, at least at the highest levels of government, but are subject to budgetary provision. It is clear that when financial resources become scarce, the commitments of government departments change—perhaps this explains the OECD finding. For example, evidence produced in the case illustrated that while the Irish Department of Education and Science has instituted targeted initiatives at providing higher education for the mature, socially disadvantaged adults, the Department of Social and Family Affairs and the Department of Enterprise, Trade and Employment altered existing support instruments in line with sectional agenda. That is, the ‘commitments enforced by the centers of interest generated in the course of action’ became dominant as reducing departmental budgets (by effectively limiting the number of Back-to-Education payments) and decreasing unemployment (through aggressive training initiatives) became the dominant commitments. What we see here are competing commitments (Kegan and Lahey 2001); that is, commitments to institutional imperatives on social inclusion compete with those originating in the aforementioned departments and their efforts to control expenditure. From a theoretical perspective, this is a form of periodic deinstitutionalization, where commitments to institutional imperatives (such as social inclusion) weaken due to changes in government policy and priorities in times of economic uncertainty (e.g. poor tax revenues caused by business cycle downturns), and strengthen once more in

times of economic growth. It is also significant that a similar form of deinstitutionalization was observed in the embedded unit of analysis as coopted private sector organisations withdrew support for the Diploma programme. It is a moot point as to whether it would have been possible to re-coopt existing (or coopt new) IT organisations into the programme subsequently by rebuilding their commitments to social inclusion through IT education. In any event, the authors now conclude that the future success of this and similar initiatives depends on the participation of IT organisations, if only to provide a direct path to employment on graduation. This, we feel, would enhance greatly the socially constructed identity of a programme, not only in the eyes of the socially excluded, but within the organisational field of IT education.

Table 3 Commitment and the Social Construction of institutional Reality (adapted from Selznick, 1949)	
Type of Commitment	Description
Commitments enforced by uniquely organisational imperatives.	Organisational imperatives (as a response to institutional influences) observed in the case's embedded unit centered on the establishment of the Diploma in Applied Business Computing for socially disadvantaged students. The commitments of the actors from the formally coopted entities in the university, the institute of technology, and the partnership company were seen to be strong and well-aligned. The commitments of coopted private sector organisations weakened due to exogenous environmental influences—although, the authors recognize that more concerted efforts should have been made to maintain them.
Commitments enforced by the social character of the personnel.	Although the majority of social actors involved in the running of the programme were from middleclass backgrounds, the working class backgrounds of key actors, and the professional, academic and socially-minded nature of the participating individuals, ensured that the special needs of the target constituency were met and obstacles negotiated more or less effectively.
Commitments enforced by institutionalization.	The various goals, policies and procedures involved in setting up the program achieved an established, value-impregnated status. Commitment to newly-established institutionalized norms and practices (from the approach taken in implementing the programme to that adopted by lecturers in delivering it) transcended those of the wider institutional contexts of the three participating institutions. Of special consideration were the commitments demanded of lecturing staff in what was a highly taxing learning environment.
Commitments enforced by the social and cultural environment.	The organisational policies and outcomes associated with the institution of the diploma were seen to be influenced and shaped by a broad range of actors in the external social and cultural environment.
Commitments enforced by the centers of interest generated in the course of action.	Whereas decentralization and delegation of decision making to the executive steering committee and individuals such as the course coordinator, support staff etc., none were seen to be influenced by the tangential informal goals of such individuals or sectional interests. Such commitments were generally well-aligned with organisational imperatives, although those of government departments tended to change in line with budgetary policy.

The empirical findings presented herein are limited to the educational organisational field and populations in Ireland. However, due to the level of isomorphism in tertiary educational organisations (i.e. they generally serve the educational needs of the privileged in society), government departments, and many private sector organisations, it is probable that the findings are applicable to organisational populations with similar characteristics. Certainly, the study's use of analytic generalization strengthens the possible transferability of the findings. Hence, one of the strengths of the study is its integration of Selznick's (1949, 1957) institutional theory with Scott's (2001) three pillars of regulatory, normative and cultural-cognitive influences to help explain success and failure in instituting an organisational response to policies aimed at social inclusion in and through IT education. Significantly, the study illustrated three possible types of cooptation at work—private-public sector, public-private sector, and public-public sector—and the commitments required to build and sustain them. It also described the type of problems that arise

when a public organisation coopts private sector organisations to help implement institutional policies and organisational responses. Drawing on the findings of the successful private-public cooptation, Selznick's theory would suggest that commitments to socially construct organisational identity are required for the cooptation of private organisations by public institutions to prosper and endure. Also, any expectation that private sector organisations deinstitutionalize cooptative structures and processes more rapidly than public organisations, such as government departments, is questionable. It was seen that government departments will rapidly alter policy positions in line with budgetary provisions to the detriment of social inclusion policies and responses enacted by non-government organisations such as universities. Thus, our penultimate conclusion is that if a government is seriously committed to implementing policy imperatives around social inclusion in higher education and lifelong learning for adults, then it has to have aligned commitments and consistent policies not only across departments, and down to state agencies, but across time as well. Otherwise it will, as Selznick (1957) cautioned, be implementing a purely 'technical' approach to policymaking and its execution that favours immediate short-run advantages over long-term consequences. Thus, as Scott (2001) indicates, active inter-temporal and invariant effort or commitment is required to sustain institutional initiatives. Accordingly, governments need to provide well-defined pathways and access to higher education by the unemployed and underemployed. In the so-called 'knowledge society' many such individuals want and need an education that provides valuable and enduring marketable skills.

Concluding on a general note, Ireland's economy is looked upon as a model of developing EU member states and others to emulate. It must be remembered, however, that Ireland was the recipient of generous social and development funds from the EU to help it modernize and to implement educational reform. It was still more fortunate to have had developed close ties with US technology-based multinationals, as they outsourced and off-shored jobs to realize the benefits of globalization in low cost economies such as Ireland. Such issues must be considered when attempting to draw upon Ireland's success as a model to follow, as must the points already made with respect to efforts at social inclusion in and through IT education described in the embedded unit. The present economic slowdown will test many countries' abilities to practice social inclusion—it will also test Ireland's ongoing commitment to broadening participation by the socially excluded in education and society.

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