ARTICLE

Learning Design, Social Ontology and Unintended Functionalism in Education Projects

Mark William Johnson*

For many years there have been well-funded project opportunities for developing educational innovations, both pedagogical and technological, to fulfil the educational ambitions of national governments and European agencies. Projects have been funded on the basis of competitive bidding against themes identified by funders. Calls for funding typically exhibit bold rhetoric as to their ambition and consequently bold claims are made in response. It is not untypical for the results of these projects to fall short of their rhetoric.

During the process of project delivery, there can arise what is termed "unintended functionalism" where the fulfilment of the project contract through the regulatory instruments of project management overrides critical challenge of the objectives and rhetorical claims, or reflection about theoretical assumptions. Two contrasting projects are examined to explore this: ITEC, a large-scale technological innovation and implementation project involving schools throughout Europe; and INCLUD-ED, a research project to describe successful educational practice around inclusion. An analysis is presented which draws on Searle's concept of 'status functions' to explain anomalies between the declarations concerning the objectives, technologies and concepts of a project and the evidence of project regulation which bear upon all project stakeholders. The contrast between ITEC and INCLUD-ED presents an opportunity to ask whether and how, in the light of better knowledge about the dynamics of constraints, the pathology of unintended functionalism might be avoided.

Keywords: social ontology; learning design; status function; project; educational technology; itec; included

Introduction: Projects and Status

Any theory, technology or pedagogic design is a declaration of the kind "this x counts as a theory/learning design/ technology within context c", where x is an assemblage of concepts, propositions or artefacts, and c is the community for whom the declaration is intended. The making of a declaration, however, doesn't mean that its validity will be upheld within its target community. Educational innovations – both technological and pedagogical – entail declarations which are often not upheld by the community they were intended for. Laurillard has commented on this recently in discussing the claims of learning technologists and theorists:

"The promise of learning technologies is that they appear to provide what the theorists are calling for. Because they are interactive, communicative, user-controlled technologies, they fit well with the requirement for social-constructivist, active learning. They have had little critique from educational design theorists. On the other hand, the empirical work on what is actually happening in education now that technology is widespread has shown that the reality falls far short of the promise." (Laurillard 2012, p83)

Falling "short of the promise" is another way articulating a mismatch between claims by innovators and the experiences and expectations of end-users. Interestingly, Laurillard doesn't consider the possibility that the declarations inherent in theories upon which technical and pedagogical designs are founded might also be wrong: she goes on to restate her interpretation of Gordon Pask's theory of conversational learning, first presented by her in 1999 (Laurillard, 1999), and instead points the finger at the institutional conditions of implementation for failure. Consequently, gaps between theory and practice persist as emphasis shifts away from theoretical description towards practical prescription. This has knock-on effects on project funders whose task is to design new funding calls based on existent theories and the state of current practice. As project follows project, whilst technologies fail readily, theories are rarely revised or rejected.

In this paper, I present Searle's theory (Searle, 2010) of social ontology as a means for explaining why this happens. Focus is placed on the funded educational project as one of the principal vehicles for educational innovation.

^{*} Institute of Learning and Teaching, University of Liverpool, UK Johnsonmwj1@gmail.com

Projects establish new declarations about new technologies, pedagogies or learning designs. To understand the root causes for the disappointment that Laurillard articulates, it is important to understand the inner dynamics of the educational project, and what happens to the declarations about their technologies, theories, aims and objectives. I present a study of two contrasting projects:

- 1. ITEC a large-scale technological innovation project involving schools throughout Europe for which a technological infrastructure was created and, ultimately, largely ignored.
- INCLUD-ED a research project aimed at describing and amplifying "Successful Educational Actions" to enhance inclusion in education through the use of a "communicative methodology". INCLUD-ED is one of a few EU projects recognised as "successful" (Net4Society, n.d.)

Using Searle's theory, the declarations about theories, practices and technologies can be studied in the context of the different stakeholder groups within which they are made. The analysis suggests that coordinated action between different stakeholder groups occurs when there are identifiable shared constraints between different groups. The projects differ in the ways different groups share constraints, but in the case of both projects, the fundamental domain of shared constraint is the demand to acquiesce with the regulatory instruments of the project funder. To different degrees in each case, this gives rise to what is identified as "unintended functionalism" which at best acts as a barrier to theoretical critique, and at worst encourages defence of indefensible propositions. Behind this problem lie concerns in the way that project proposals and plans are accepted by funders, where plans themselves are also status function declarations. What emerges is a complex picture of interacting constraints whose dynamics present both a challenge and an opportunity to develop better ways of engaging with educational innovation.

Searle's 'Status functions' and Social Ontology

Searle introduces his concept of 'status function' as a way of accounting for those aspects of social reality which exist through human action, which he terms 'ontological subjectivity' (2010). Beyond material facts of physics (Searle calls this 'ontological objectivity'), private sensations like itches ('epistemic subjectivity'), or social facts like dates of battles, births or deaths ('epistemic objectivity'), Searle argues that most of the social world is constituted by declarations of 'status function' – a particular kind of speech act made within a community who uphold it through their 'collective intentionality'. Declarations are made by a social entity (a King, Government or a corporation) with sufficient authority (what Searle calls 'deontic power') to make an utterance of the form "X counts as Y in C" (e.g. "This paper counts as money in country c"). In arguing that the entities of the social world, (institutions, technologies, monarchies, etc.) are all manifested as status function declarations held together through the 'collective intentionality' of communities, Searle goes beyond his earlier work on speech acts (1969), acknowledging a social reality which he previously appeared to ignore. In education, real things like textbooks, teachers, universities, degrees, timetables, curricula, league tables and learning technologies also can be seen to be status function declarations, and understanding this invites the study of how declarations are made, and under what conditions they are upheld.

Searle's idea has far-reaching consequences, enabling him to consider not only the reality of objects and institutions, but human rights, armed forces, nation states, gender identity and so on. Here I concentrate on status function declarations made about educational technology and pedagogical approaches. The power to make such declarations rests variously with technical designers, pedagogical designers, project teams, occasionally teachers, and often managers. Many status function declarations about technologies or pedagogies - particularly within projects - fail to establish themselves in the communities for which they are intended. Consequently, the technology cannot be sustained. Occasionally, a status function declaration is made such that the deontic power behind it is sufficient for the gradual emergence of broad social agreement that the status function is indeed valid (which is the case now for mobile phones, email and social software).

Any new status function is made in the context of many other established status functions within a society, institution or other social group. Typically technologies aim to disrupt established rituals of practice involving other kinds of object, practice and institutional structure. Additionally, every status function, as well as being a statement about what is what in context C, is also a statement about what is not what: status functions are both positive in affirming an object, and negative in declaring a constraint.

Given that status functions declare constraints, it would not be surprising to see different status functions competing with each other, or contradicting each other, each being the others' constraint. Technological status functions produce patterns of mutual constraint through implicit rights, duties and obligations inherent in their usage. The assertion, usually by technology corporations, of the status of objects such as software demands the acquiescence of users, whose emerging ritualised patterns of practice induce fears in breaking rituals which further entails the use of the tools about which the status functions are made. In social life, the status functions that each of us lives with comprise highly complex webs of mutual constraint: the declaration of a new status function in a preexisting web of status functions can exacerbate tensions between those constraints. It is the inability to counteract the forces prevalent among existing status functions that most technologies fail. To say there is "nothing in it for me to use technology x" is to say that existing commitments demand the maintenance of practices which would be unnecessarily disrupted by a new technology. However, in order to understand how it is that some status functions actually do succeed in transforming the constraints that

people live within, it is important to understand the forces that keep constraints mutually dependent, or break them apart. In a project, the dynamics of constraint between different stakeholders can be understood by comparing the status function declarations that are made and the evidence of practice that emerges as a result of the attempt to establish new technologies or practices.

Case Study 1: The ITEC Project

The ITEC project set out to establish an ambitious technological infrastructure which would support both the execution and coordination of innovative pedagogy using technology. Aiming to bring technological and pedagogical innovations closer to-hand for teachers across Europe, ITEC has sought to transform the context of teaching and learning in the hope that the agency of teachers will follow. Inspired both by the discourse on Learning Design (Koper, 2004; Laurillard, 2012) and by thinking about new opportunities for personalisation of learning through initiatives like the Personal Learning Environment (Johnson and Liber, 2008), ITEC's vision encompassed greater personalisation and technological control by learners, coordinated with an infrastructure which would facilitate large-scale piloting and evaluation of educational 'scenarios'. Whilst it has raised awareness of technology across Europe, allowing many teachers to experiment with different kinds of pedagogy (particularly inquiry-based, classroom flipping, etc), measured against its ambition to create a sustainable technological infrastructure to support 'the classroom of the future', ITEC (like so many other projects before it) has largely failed.

The focus here is on comparing the ITEC vision of "transformed teaching and learning" with its reality, investigating and explaining the difference between hypothesised social transformation and actual events. It is argued that phenomena which emerge in projects like ITEC are of significance for any attempt to intervene with new pedagogical schemata, tools for encouraging pedagogical design, attempts to analytically determine learning needs, or attempts to reproduce formal education using technology.

Case Study 2: The INCLUD-ED Project

The ambitions of the INCLUD-ED project are, in a broad sense, very similar to ITEC. INCLUD-ED states:

"In today's knowledge society, education can serve as a powerful resource to achieve the European goal of social cohesion. However, at present, most school systems are failing as shown by the fact that many European citizens, and their communities, are being excluded, both educational and social, from the benefits that should be available to all."

INCLUD-ED involves a descriptive approach to studying educational interventions, with its focus on identifying what it calls "Successful Educational Actions" and "Integrative Successful Actions". Its methodology seeks to identify those actions for which evidence indicates similar beneficial results across different contexts. In identifying different outcomes in different contexts, INCLUD-ED has been unified by a single methodological approach based on dialogue. Arguing that traditional research techniques tend to privilege one voice over others, a dialogic approach (Flecha, 2000) has been used to capture the voice of vulnerable groups including Roma, people with disabilities and so on. INCLUD-ED explains:

"While the voices of vulnerable groups have been traditionally excluded from research, the communicative methodology relies on the direct and active participation of the people whose reality is being studied throughout the whole research process. After years of doing research on them without them that has not had any positive repercussion on their community, the Roma refuses any kind of research that reproduces this pattern. With the communicative methodology, Romani associations have seen the possibility to participate in a research that takes their voices into account and provides political and social recommendations that contribute to overcome their social exclusion." (INCLUD-ED, 2012)

The INCLUD-ED project is one of a number of EU projects which have been deemed by the EU Commission to be successful (Net4Society, n.d.). Aimed at establishing best practice for inclusive education, INCLUD-ED does not involve technological development per se (unlike ITEC), but rather involves the exploration of a number of different pedagogical scenarios. In the following analysis, the contrast between INCLUD-ED and ITEC can be seen in the relations between the different status function declarations within the projects.

Status Function Declarations within Projects and among Stakeholders

The first and most important status function declaration is the statement, "This is project," which carries a set of rights, obligations and duties bearing upon the project stakeholders. The context within which this declaration has power includes the project management team, the funders, and the individuals with whom the project is conducted. Projects win funding by making assertions about the status functions they will bring into being. Typically, these are the "objects" of the project. For example, the ITEC project identifies through its project plan the following technologies and entities which it proposes to create:

- learning scenarios (a broad description of educational activity)
- · a widget store (a repository of tools)
- widgets (a tool)
- learning activities
- a "composer" (a way of recording configurations of activities and tools)
- a 'people and events' database (a kind of educational CRM system)
- a learning shell (basically a container for educational activities, people and tools e.g. a VLE)
- evaluation questionnaires

- a 'shell' for containing learning activities (basically, a VLE)
- \cdot national coordinators of ITEC activities in each country

Unlike ITEC, INCLUD-ED is not a development project, placing less emphasis on declaring new entities, but rather makes claims for the status of "Successful Educational Actions" (SEA) and "Successful Integrative Actions" (SIA) by examining existing practices and their effects. INCLUD-ED makes assertions about a particular methodological approach, a "communicative methodology". Such claims are largely intended for an academic audience justifying an approach which involves stakeholder engagement at a deep level.

Both formal educational situations in classrooms, and informal situations are of interest to both projects. ITEC, however, places particular emphasis on school teachers as the target user group of many of its technologies. Teachers, however, already inhabit a world of status function declarations from various sources. The typical status functions bearing on a teacher in formal education include:

- "This is the head of your school"
- "These are the professional expectations for your performance"
- "These are the children/students you are responsible for"
- "These are their parents"
- "These are the expectations the children's parents have for their children"
- "These are the league tables of your school (if they have them)"
- "These are the assessments the children will have to pass"
- "This is your timetable"
- "This is the curriculum"

Parents and students similarly will have a complex web of status functions to negotiate. The status functions of the projects and the existing status function declarations of professional and personal life may conflict. Individual teachers, project officials, national coordinators and software developers have to make choices about their actions. Each status function declaration presents an aspect of constraint against which choices must be negotiated: whilst each declaration makes a statement of the positive existence of a thing (headteachers, widgets, evaluation questionnaires) each simultaneously declares an absence – what isn't a headteacher, widget, evaluation questionnaire, 'successful educational action', and so on. A status function declaration is a distinction about a boundary.

For each individual stakeholder in a project, we might also consider "unarticulated" or "potential" status functions – what Harré refers to as an inner 'storyline' (Harré and Langenhove, 1999): the things people might want to say, or declare in the future, but don't yet have the position or supporting evidence to articulate as their own status functions. Whilst these would not fall into Searle's category of status functions (as they are not speech acts), they do form part of the "collective intentionality" within which actual status functions establish themselves. Within this, we might consider personal ambitions, personal priorities in terms of caring for loved ones, maintaining a stable income, identifying domains for control, wishing for promotion or keeping one's job.

Any project has to negotiate its status declarations within the context of existing status function declarations that already exist within the setting in which it aims to intervene. These in turn define the domain of collective intentionality for the project. Given the potential for conflict between the expectations of different stakeholders, any project might hope that it establishes a dynamic between the inner wishes of individual stakeholders, the existing professional responsibilities of those stakeholders, and the innovations suggested by the project. In other words, it hopes that the intervention of the project creates a dynamic between constraints whereby the new innovations are established and held in place because of:

- The dynamic between individual ambition and professional constraint
- The dynamic between professional constraint and project interventions
- The dynamic between project interventions and individual ambition

Given these dynamics, we can visualise the knotted tensions inherent in the web of status functions and intentionality through the metaphor of a Trefoil knot (Kauffman, 1995). The trefoil knot in **Figure 1** shows how each declaration is a constraint for the other, but each constraint holds the others in place:



Figure 1: Relationship between personal, professional and project constraints as a trefoil knot.

The metaphor is useful because when trying to understand the intentions of a bidding team which makes status functions as part of their bid, it will be hoped that new declared status functions produce social change precisely because they are successful in "tying new knots" in the lived experience of teachers and learners: so, for example, teacher x's ambition shifts to seeing the adoption of technology z as crucial for their career advancement, or schools see that a particular educational intervention has proven success. Should this happen, then technological or pedagogical adoption can be achieved. Unfortunately, this rarely happens. In reality, the professional constraints of teachers with limited time and resources dominate and project interventions tend not to be sustainable.

Evidence from ITEC: Stakeholder evaluation and action

Both in its declared division of labour within the project team, and among the different artefacts and activities that each group is responsible for, the roles, responsibilities, duties and obligations of the ITEC project team are clearly defined. Most basically, there are those who are in charge of pedagogy, there are those who are doing software development and there are those who are trying to manage it all. Each group brings different constraints, and each group of stakeholders will be enmeshed in their own knots relating to their professional practice and personal wishes. Technology partners are responsible for upholding the status functions concerning project technologies (widget stores, composers, and shells) and pedagogical partners are responsible for developing learning scenarios, activities and engaging with school teachers in encouraging them to use technologies produced by the project.

For all members of the project team, there are other status functions, some of which directly concern the management of the project, but others which relate to professional identities as academics of either education or technology. For example, amongst academics in different disciplines (e.g. technology or education), there will be differing orientations to professional discourses or journals which might be targeted for publication of activities. At the same time, each group will have specific responsibilities for producing deliverables (i.e. software, reports, or classroom interventions), keeping activities within their respective budgets, and maintaining particular networks of actors whose participation is necessary for the successful completion of their part of the project.

Project managers must make declarations which are meaningful to the project funders. The measuring instruments of any project are its deliverables, measurable success criteria, budgets and reports. Any change in project direction entails a new set of status function declarations which have to be agreed with the funders. Each aspect of the relation with funders can be seen to constitute status functions with inherent rights, duties and obligations between stakeholders. The critical issue concerns the relation of the status function declarations pertaining to the management of the project, and the status function declarations concerning the project's activities – either in the creation of new technologies or innovative pedagogy.

ITEC widgets: the fate of a technological status function

As an example of how ITEC's status function declarations related to the practice of teachers and the instruments of project funders, the creation of ITEC's 'widget store' is instructive. The idea of the widget store was to create a repository of educational tools which could be easily dropped-in to existing school technologies by teachers. In ITEC, the developers asked the national coordinators (who oversaw the activities of teachers in their countries) "How does the widget store fit with the overall vision/ philosophy of education in your country?" In response, stakeholder comments appear to attempt to balance a rejection of the technology whilst maintaining commitment to the project's ideals. For example, one National Coordinator (NC) responded:

"The teachers involved in the iTec project are pretty well-skilled in the use of technology so the widget store is another source of tools among others they still have available. So to make the widget store more attractive we introduced it as tool to include their own content into the shell, and to share it with other iTEC teachers who are using shells as well." (ITEC NC Interview, n.d., p1)

The statement is interesting because whilst effectively presenting the case that the Widget Store was surplus to requirements, upheld another technological status function of the project, the Shell. Shells are more broadly defined than widgets (practically anything can count as a shell!), and so the commitment to shells over widgets was a way of maintaining commitment to the broader status functions of the project whilst rejecting the specific widget technologies.

A more positive statement in response to the same question came from another country's education ministry:

"In terms of the vision of education here, there is definitely a change in education relating the teachers training and expectations of them regarding using 21 century skills – especially using technology. There is a very big education program of adapting the educating system to the 21st century with emphasis on using technology – therefore in terms of vision and philosophy – the widget store definitely fits the education system" (ITEC NC Interview, n.d., p6)

In effect, this questionnaire response reproduces the project's own rhetoric without any firm commitment to any of the technologies: a strategy for maintaining commitment to the project whilst avoiding interference with established practices.

Even when responses are a little more blunt, there remains some degree of equivocation and strategic negotiation of the status functions of the project:

"For 13–15 yr old age group it doesn't really fit with the curriculum. It has been used across a number of subject areas." (ITEC NC Interview, n.d., p9)

In the light of this comment, one would expect to see indications of usage from web statistics since the technology has been used across the curriculum. However, the web statistics remain low for access to the tools. This is a statement which claims compliance with the project processes, but rejects the project technologies: maintaining a connection with the project without engaging in new practices which might disrupt the status quo. A similar problem of disparity between the low web statistics and positive reports emerges from another national coordinator who enthusiastically said: "[we] have continuously worked with the Widget Store – it is one of the highlights of the iTEC project." (ITEC NC Interview, n.d., p4)

An indication of the kind of tensions existing when trying to establish the technology was expressed by a participant who said:

"We ask teachers to experiment with the Widget Store because it is a structural part of iTec. The main challenge [. . .] is to ask teachers to experiment with a technology that they are not familiar [with] compared with the ones they already use. [. . .] most of the iTec teachers are advanced, so they prefer to use technology they already know (and trust), experimenting more in pedagogy." (ITEC NC Interview, n.d., p1)

This is to affirm commitment to the pedagogical side of ITEC at the expense of the technological side. Despite this, some feedback on the widget store is positive. For example, one national coordinator comments "Most teachers said they would like to continue to use the widget store after the project, esp[ecially] if there are more resources" (ITEC NC Interview, n.d., p10), and in the project's evaluation the potential benefits of the widget store are summarised as:

"accessibility of resources (21 respondents); a structured approach (18 respondents); access to a variety of widgets (13 respondents); ease of use (11 respondents); efficiency and time-saving (11 respondents); and motivational for teachers and students (11 respondents)" (ITEC Internal Deliverable 5.6, 2013, p8)

As a footnote to this summary however, it is stated that "Teachers were asked an open question in the survey asking them to identify the potential benefits of the Widget Store. The relatively small numbers of teachers identifying each of the themes reported here reflects the fact that individual teachers have varied views and have experienced iTEC in different ways" (ITEC Internal Deliverable 5.4, p8).

The Widget Store was not the only status declaration of the project, but engagement with it demanded significant disruption to existing practice which most teachers were unwilling or unable to do. Rejection of the technology by participants was defended by a number of teachers, but this rejection was reported in a way which didn't damage commitment to the project as a whole. All stakeholders appeared willing to commit to the project goals (the rhetoric) but in a way that would be least disruptive to their existing practice.

This raises questions about the reasons for maintaining commitment to the project, but not to the tools. The ITEC project without the tools was effectively a set of rhetorical claims about educational innovation, and broad status function declarations concerning "pedagogical scenarios". For teachers, association with the project the status of being an 'ITEC teacher' carried some weight within their individual schools and provided opportunities for engaging in a broader discourse outside their immediate environment. If these commitments could be maintained, together with engagement in the instruments of the project (evaluation processes, training sessions, etc.) then the project could be integrated into the web of status functions that teachers were already immersed. However, this strategy puts the emphasis on the instruments of the project management and evaluation, rather than the specifics challenges of its technological and pedagogical aims. In this way the management devices which were intended merely to steer the project towards realisation of a technological and pedagogical vision became the principal status functions which constrained all the stakeholders.

INCLUD-ED Status Function Declarations and Declared Social Impact

INCLUD-ED is unequivocal in the assertion of its achievements:

"knowledge transfer between research and institutions, practitioners and end-users has been effectively achieved. SEAs [Successful Educational Action] has been extended and implemented in a diversity of national contexts accounting for the support of institutions and local administrations. In order to do so, the coordinator institution has signed several agreements with local administrations, trade unions and universities, to make the SEAs accessible to more people who benefits from the research results." (INCLUD-ED, 2012, p74)

In terms of status function declarations, knowledge exchanges involve a status function in one domain being carried over into another: in Searle's terms, it is the status function declaration of "X counts as Y in C1", followed by "X counts as Y in C2". In moving from C1 to C2, there may of course be change in the collective intentionality of the new context, C2, partly caused by the increased deontic power of successfully making the declaration in C1. However, much is obscured in the statement that knowledge exchange has been successful and whilst evidence is provided of press reports about various initiatives in European education stemming from INCLUD-ED, and through mentions in EU policy documents, the actual details of the differences and similarities between contexts and interventions, and the causal power of INCLUD-ED's original distinctions are hard to establish.

Given that INCLUD-ED is an academic research project, the production of significant academic outputs is unsurprising. INCLUD-ED claims that:

"The project's major findings have been published in relevant international and national journals. Among the 70 paper publications produced, 25 of those have been published in the journals ranked by the ISI JCR [...] Additionally, INCLUD-ED's findings have been presented, and well received, at the most important international scientific conferences in the field of education sociology" (INCLUD-ED, 2012, p70) Each publication is a status function declaration, where the academic discourse provides a domain of 'known collective intentionality' where successful publication is relatively straightforward for professional academics. Furthermore, within a project team comprising academics, there will be collective intentionality about which journals to publish in, things to write about and so on. Whilst publications alone don't indicate success on the ground, their presence helps to increase the deontic status of the project in supporting claims for its effectiveness. INCLUD-ED's emphasis on dialogue suggests that it is here not status function declarations that matter per se, but rather a process to identify the collective intentionality of groups within which certain practices dominate. INCLUD-ED sets out to identify the status function declarations of existing practices and the collective intentionality which supports them, rather than making new status function declarations as in ITEC – which it then has to create the collective intentionality to support.

The manner of INCLUD-ED's project organisation is also interesting in comparison to ITEC. INCLUD-ED features a number of "sub-projects" ranging from literature reviews, to particular longitudinal case-studies. By dividing its work into different projects and having those projects engage different stakeholders, INCLUD-ED could pass the 'deontic power' for making status function declarations to sub-teams who could then manage their own activities relatively autonomously.

The dialogical process of INCLUD-ED is overseen by a set of committees including an advisory board comprising people from vulnerable social groups and a panel of experts and scholars in the field. INCLUD-ED is a consensus driven project, where the principal status declaration that is made concerns the importance of community engagement, the representation of stakeholder voices and policy impact. It keeps its status function declarations to a minimum by asserting its method and goals of identifying "Successful Actions". INCLUD-ED claims impact on policy through citation of its work in policy documents.

Whilst INCLUD-ED's dialogical approach appears far more sensible than ITEC's long list of technologies-tobe-made, it should be noted that INCLUD-ED made no attempt to intervene in practice through technology in the way that ITEC did. INCLUD-ED sought to identify and reproduce successful practices. If there is a problem with the dialogic method it is the fact that the approach privileges consensus between participating groups rather than exploring particular differences or difficult areas of innovation. Moreover, the emphasis is on evidence for success in the form of educational performance metrics: there is little appetite for engaging in deeper critique of the different interpretations of 'success' in education. In this light, the communicative methodology appears as a kind of pragmatic strategy for establishing success in a way that is easily defended but which may not challenge expectations. This kind of 'groupthink' pragmatism has attracted criticism – particularly from the Frankfurt school – for a long time. Dialogue and consensus can lead to the "crowd mentality" which Horkheimer saw as a pathological component of technocratic manipulation:

"the individual's self-preservation presupposes his adjustment to the requirements for the preservation of the system. He no longer has room to evade the system. And just as the process of rationalization is no longer the result of the anonymous forces of the market, but is decided in the consciousness of a planning minority, so the mass of subjects must deliberately adjust themselves: the subject must, so to speak, devote all his energies to being 'in and of the movement of things' in the terms of the pragmatistic definition" (Horkheimer, 1947, p67)

Where ITEC presented teachers with plenty of opportunities to 'evade the system', the extent to which INCLUD-ED's dialogic method provided opportunities for expressing real difference among stakeholders, rejection or critique is unclear. Although successful in engaging disadvantaged groups, unsuccessful educational actions amongst those groups would present greater opportunities and challenges for explanatory critique than successful ones. Successes may not receive the same level of critical attention – particularly if successes please funders and failures worry them.

The emergence of unintended-functionalism as the binding force of a project

In turning to the collective intentionality that is shared between project teams and the project funders and reviewers, the emergence of "unintended functionalism" whereby compliance with management instruments overrides critical engagement with the core issues in the project – becomes apparent. Even with projects like INCLUD-ED which produce management-pleasing results, such results can be seen to be framed by the regulatory instruments of the project. Relationships between funders, management and the project team are determined by a set of status function declarations which are contained in the project plan documentation in the form of deliverables, milestones, measurable success criteria, dissemination activities and so on. In most projects, the ambition of broad aims has to be reduced to a set of measurable indices by which funders can be assured of claims for the success and effective operation of the project. There are measurable targets for the number of interviews conducted, the number of case-studies explored, the number of users using a tool or the number of papers published. If deliverables are deemed inadequate or targets not met, then the project risks being stripped of its funding, with various unpleasant implications for all project stakeholders. The collective intentionality that binds funders with project management concern these primary shared constraints and is the fundamental reason why the functionalism of management regulation becomes dominant.

ITEC and INCLUD-ED provide contrasting examples of how this can affect project activities. Among ITEC's status function declarations was the identification of different groups of stakeholders whose primary concerns were either pedagogical, or in developing technology. Each group took responsibility for separate but interconnected parts of the project, and each group had a set of measurable outcomes to fulfil their part of the project contract. These included the number of classrooms where innovations took place, the number of users of the technology and the number of innovative learning scenarios created. The results of the project, captured in the interviews discussed above, demonstrate that the "collective intentionality" of ITEC teachers was held within a web of constraints of which the project objectives were but one aspect. Most importantly, each stakeholder was either directly funded (key project personnel) or supported in their activities (teachers) and consequently bound in various ways to the contract of the project whereby support could be withdrawn in the absence of engagement or success. The equivocal responses of teachers and the mismatch with real evidence of engagement with tools in ITEC demonstrates the balance that they attempted to create between satisfying the instruments of the project management and compromising other commitments and status function declarations pertaining to their professional practice. Moreover, the dominant presence of the status functions of the project plan meant that changing project direction or methodology entailed an onerous renegotiation with funders. Inevitably, compromises meant that the underlying status function declarations were preserved and flexibility to evolve was restricted.

By contrast, INCLUD-ED's communicative method and its effort to describe and amplify existing practice rather than generate new practices, enabled it to make far fewer status declarations with funders. INCLUD-ED benefited from not having a remit to make direct interventions in designing learning to see if designs worked or not. The dialogical approach identified the collective intentionality of stakeholder groups, where status function declarations with funders concerned achievable targets to publish results in journals, influence policy, and address a certain number of case-studies. These were more achievable than ITEC's status functions because most declarations were made with communities whose collective intentionality INCLUD-ED knew well (for example, the academic community). INCLUD-ED met funder and management criteria more readily than ITEC by identifying the 'success' of the educational activities it studied and through academic publication. However, the lack of awkward questions and an uncritical view of educational success suggests that INCLUD-ED's management instruments remained the principle frame for the project's intellectual direction. The difference with ITEC is that INCLUD-ED's stakeholders were less likely to be placed in positions where they had to compromise the demands of the project with existing duties and responsibilities.

Implications for Designing Learning: Plans and Intersubjectivity

Unintended functionalism in projects is a consequence of planning: the mechanisms of project management are contractually-defined at the outset. The status declarations of ITEC (to a great extent) and INCLUD-ED (to a lesser extent) can be seen as declarations of anticipated futures, or plans agreed with funders. In educational projects, such declarations amount to 'designs for learning': status function declarations include statements about the proposed content, learning activities, technologies to be used, the purpose of tools or activities and the status of any analytical reports that might result. ITEC's proposed activities entailed the creation of new tools, whereas INCLUD-ED's activities involved the execution of its communicative methodology and the identification of successful actions. If the contractual promise to deliver the proposed activities was broken, then funders would have to implement sanctions which would affect all stakeholders. Thus whilst no project intends to be driven by its management instruments, planning and the project contract make it inevitable that it will.

The issue of planning and the extent to which plans are upheld as valid or not throws the spotlight onto the relations between project funders, bidders and the collective intentionality of funders that supports one plan (a project bid) over another. Having a plan accepted and funded means that the declarations inherent in the plan are upheld within the collective intentionality of the funding committee. This support is itself dependent on the fulfilment of specific 'funding criteria' which provides a further level of status function declarations upheld by funders as part of their operating procedures.

Both Searle's theory and INCLUD-ED's communicative method acknowledge some debt to Alfred Schutz's theory of 'intersubjectivity' within which 'planning' occupies a particular area of concern. Schutz argues that:

"there is a great difference between action actually performed and action only imagined as performed. The really accomplished act is irrevocable and the consequences must be borne whether it has been successful or not. Imagination is always revocable and can be revised again and again. Therefore, in simply rehearsing several projects, I can ascribe to each a different probability of success, but I can never be disappointed by its failure. Like all other anticipations, the rehearsed future action also has gaps which only the performance of the act will fill in." (Schutz, 1971, p77)

Schutz also makes a distinction in intersubjective relations between face-to-face relations and what he calls the "world of contemporaries". Plans for classroom practice and pedagogical designs are implicitly articulated by teachers and institutions, and upheld by institutional and societal declarations of the curriculum, timetables, and so on. Some aspects of planning for learning are conducted with the face-to-face relation in mind; others consider the more remote "world of contemporaries". As with all plans, there are gaps for the teacher to fill in the flow of practice. A declaration of a plan within a face-to-face context such as "This is a course on Java Programming" entails different adjustments to practice if the same declaration is made in a more remote online context (for example, in a MOOC on Java Programming). In Searle's terms, the difference between the declaration within the face-to-face context and Schutz's broader and more

remote "world of contemporaries" entails fundamental differences in the conditions for collective intentionality, and differences in the rights, duties and obligations within the community.

Schutz's concept of intersubjectivity is significantly more refined than the intersubjectivity described in Flecha's (2000) dialogical method upon which INCLUD-ED is based, and indeed Searle does not explore the differences in interpersonal relations and how this might affect collective intentionality. Schutz's intersubjectivity concerns the spectrum of human relations from face-to-face intense engagements to engagements with people who we don't know very well, to imagined engagements with ancestors or successors.

Projects have to make plans within the context of relations within academic discourse and the criteria of funders, with little knowledge of the actual lives or thoughts of project funders, or the stakeholders with whom they propose to work. In both learning design and in project design, the transposition of status functions from face-to-face situations to engagements in the remote "world of contemporaries" and vice-versa can cause problems of interpretation among stakeholders where there may be little scope to adjust interventions to make the communications work. A dialogical methodology such as INCLUD-ED's at least presents an opportunity for establishing collective intentionality on a face-to-face basis before any status function declarations are made by the project. However, ITEC too had many face-to-face meetings. Yet as Schutz observes, on exiting the face-to-face meeting, individuals return to their relations in the world of contemporaries. In ITEC, despite face-to-face meetings, it was often difficult to bridge the gap between the faceto-face relations and remote relations. In the end, these difficulties meant that the only common constraints that existed concerned the management instruments of the project and that ultimately this proved to be the focus within face-to-face meetings too.

Conclusions and Recommendations: From Management to Organisation

Whilst very different, the two projects studied highlight the same problem of unintended functionalism from different angles. Some of ITEC's technological commitments in its plan meant that compliance with management regulations became a position of last resort in the face of almost impossible tasks. INCLUD-ED had fewer onerous commitments and possessed management instruments which were readily satisfied with the project's activities, but in both cases, the commitments in the project plan represent universal constraints. It is therefore not surprising to see teachers in ITEC wrestling with supporting the project's aims whilst rejecting its tools, or to see INCLUD-ED not engage critically with the notion of educational 'success'. Academic projects demand critical engagement at all levels: most important are questions like "are our results what we expect?", "are our assumptions right?" or "are the theories sound?" Yet the unintended functionalism of project management creates conditions where certain questions cannot be asked.

ITEC's status function declarations formed the core of the project management contract with the funders which meant that to rethink interventions would have entailed a significant renegotiation of the project contract. By contrast, INCLUD-ED offers a more flexible model which could adapt easily to circumstances as they unfolded. INCLUD-ED's principle differences from ITEC are:

- INCLUD-ED didn't make as many status function declarations as ITEC;
- As a research project, the status function declarations INCLUD-ED agreed with funders needed only to be upheld within the academic community which it knew rather than be supported by a wider constituency which it could not know at the outset;
- INCLUD-ED's communicative methodology was an instrument for identifying collective intentionality – any new status function declarations could harmonise with existing expectations of stakeholder groups (for example the declaration of 'successful educational actions');
- INCLUD-ED's project organisation in separating itself into separate projects, was effectively a way of passing on the deontic power for making status declarations at a local level, rather than from senior management;
- INCLUD-ED's acquiescence with regulatory instruments was fairly straightforward and did not appear to produce the kind of contradictions that were found in ITEC.
- INCLUD-ED, unlike ITEC, did not have to create interventions which were at risk of failure.

The essential advantage of INCLUD-ED's "communicative methodology" is pragmatic: it meant that other status function declarations could be pushed down into lowlevel layers of project beyond the concern of funders. Yet critique of the underpinning theory of the communicative methodology is lacking. Whilst claiming to be built on the work of Mead, Schutz and Vygotsky, INCLUD-ED's conception of 'intersubjectivity' is vulnerable to critique by those whose ideas are cited as foundational (particularly Schutz), and those like Horkheimer who criticise its pragmatism. Thus, even with an apparently successful project like INCLUD-ED, critical questioning of its methodological fundamentals would amount to undermining the basis of its contract with the funders. Here too, the regulative management instruments preclude intellectual engagement with the project foundations.

How might unintended functionalism in projects might be avoided? The deep problem rests with the way resources are allocated to the collective intellectual activities of projects. Understanding the nature of contractual commitments with funders as status function declarations helps to clarify the dynamics of constraint in projects. The avoidance of unintended functionalism entails finding new ways of allocating resources where reflexive and agile theory-building, methodology and critique can be combined with practical needs-based intervention with communities. Rigid contractual commitments between projects teams and funders inevitably compromise free and critical thinking because management regulatory tools are universal constraints bearing on all stakeholders: our application of Searle's theory highlights the challenge as one of avoiding universal constraints, or universal project status functions. Rather than exercising universal constraints within projects, we might reconceive project management as diffused throughout self-organising project activities, where project *organisation* rather than project management becomes the principal focus for coordination.

Competing Interests

The author declares that they have no competing interests.

References

- Flecha, R 2000 Sharing words: Theory and Practice of Dialogic Learning. Washington DC: Rowman & Littlefield Publishers.
- Harré, R and van Lagenhove, L (eds.) 1999 *Positioning theory: Moral contexts of intentional action.* Malden, MA: Blackwell.

Horkheimer, M 1947 The Eclipse of Reason. Oxford: OUP.

- **INCLUD-ED** 2012 Strategies for inclusion and social cohesion in Europe from education D. 25.2 FINAL INCLUD-ED REPORT. Available at: http://www.nesetweb.eu/contentresource-library/strategies-inclusion-and-social-cohesioneurope-education-includ-ed-final (viewed 25/7/2015).
- ITEC Internal Deliverable 5.4 2013 Available at: http://itec. eun.org/web/guest/deliverables (viewed 25/7/2015).
- **ITEC NTC Interviews** (n. d.) Available at: http://tinyurl. com/ITEC-NC-Interview (viewed 10/11/15).

- Johnson, M and Liber, O 2008 The Personal Learning Environment and the Human Condition. *Interactive Learning Environments*, 16(1): 3–15. DOI: http://dx.doi. org/10.1080/10494820701772652
- Kauffman, L H 1995 *Knots and Applications*. Singapore: World Scientific. DOI: http://dx.doi.org/10.1142/2515; http://dx.doi.org/10.1142/9789812796189
- Koper, R 2004 Educational Modelling Language: Modelling reusable, interoperable, rich and personalised units of learning. *British Journal of Educational Technology*, 35(5): 537–551. DOI: http://dx.doi.org/10.1111/j.0007-1013.2004.00412.x
- Laurillard, D 1999 *Rethinking University Teaching: A Conversational Framework for the Effective Use of Learning Technologies.* London: Routledge.
- **Laurillard, D** 2012 *Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology.* Abingdon: Taylor and Francis.
- **Net4Society** (n. d.) Success Stories: Impact of Socioeconomic Sciences and Humanities. Available at: http://www.net4society.eu/public/382.php (viewed 25/7/2015).
- Schutz, A 1971 Problem of Rationality in the Social World. In: Brodersen, A (Ed.) *Collected Papers, Vol II Studies in Social Theory.* Martinus Nijhoff: The Hague.
- Searle, J 1969 Speech Acts: An essay in the philosophy of language. Cambridge: Cambridge University Press. DOI: http://dx.doi.org/10.1017/CB09781139173438
- Searle, J 2010 Making the Social World: The Structure of Human Civilization. Oxford: OUP. DOI: http://dx.doi. org/10.1093/acprof:osobl/9780195396171.001.0001

How to cite this article: Johnson, M W 2016 Learning Design, Social Ontology and Unintended Functionalism in Education Projects. *Journal of Interactive Media in Education*, 2016(1): 5, pp. 1–10, DOI: http://dx.doi.org/10.5334/jime.398

Submitted: 04 October 2015 Accepted: 15 October 2015 Published: 19 January 2016

Copyright: © 2016 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 3.0 Unported License (CC-BY 3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/3.0/.

]u[Journal of Interactive Media in Education is a peer-reviewed open access journal published by Ubiguity Press.

