High Speed, High Pressure Learning in UK Feature Film Units

Linda Ludwin
Senior Lecturer and Programme Leader Arts & Cultural Management
Department of Performing Arts
University College Chester
England, United Kingdom

Linda Ludwin's research interests centre on temporary organizations, particularly those producing cultural goods and services. An academic, consultant and trainer, she co-founded Big Pond Productions with British producer Jon Finn.

Abstract
UK film units are efficient knowledge communities. Learning is a core concern of these organizations, which are temporary by design, and fall outside many existing epistemological theories. Tacit non-codified knowledge is embedded in film unit systems as well as being rooted in individuals and semi-permanent work groups. Industry-standard production practices enable effective learning and facilitate the transfer of knowledge from one unit to another, enabling strangers to work together effectively.

Keywords
Film production, knowledge community organizational learning, project management, temporary organization

Introduction

In around 35 weeks, UK feature film units range from employing a single individual to many hundreds of specialists, using an astounding range of sub-contractors for the provision of goods and services. In terms of finance, millions of pounds sterling are spent within the same brief time frame. Each unit faces unique demands generated by its particular script.

On film units, most cast and crew members meet for the first time at a social occasion. The next day the production is in full swing. How do people who work in temporary organizations know how to work together? How does learning take place rapidly and effectively in transient settings? What happens to the learning in a temporary organization when it ceases to exist? Is learning transferred from one temporary organization to another, and if so, how? These issues led to the formation of this paper's central research question: how do temporary organizations such as UK feature film units learn?

Methodology

This paper draws on research findings from a larger embedded single-case study. The principal case was the UK's feature film production industry in the 1990s and the early 21st century. The primary methodological influence was Robert K Yin's (1984, 1994) Case Study Research: Design and Methods. In terms of data analysis, Strauss & Corbin's grounded theory method was employed for coding (1990).

Fieldwork, undertaken in and around London, England during the 1990s, included in-depth qualitative interviews with successful specialists in UK feature film production. Individuals became sub-units of analysis. They were promised anonymity and assigned pseudonyms.

The participants (with the job titles they held at the time I interviewed them) were:

1. Ann, producer
2. Bob, production manager
3. Don, location manager
4. Ed, production manager
5. Huw, director of photography
6. Jim, production manager
7. Kay, production executive
8. Pam, production co-ordinator
9. Sue, production manager/coordinator
10. Tim, production manager

Every interview was audio-taped and transcribed in full.

Considering their 2002 CVs as published on the website Internet Movie Database (http://www.imdb.com/), all but one are at the top of their professions in UK-based feature film production, succeeding as freelance contract workers (except Kay and Jim, who are employed by production companies). Individuals' credits subsequent to participating in my study include a mixture of creative and financial successes, such as: My Little Eye (2002), The Importance of Being Earnest (2002), Star Wars: Episode II - Attack of the Clones (2002), Bridget Jones's Diary (2001), Gladiator (2000), 102 Dalmatians (2000), Billy Elliot (2000), O Brother, Where Art Thou? (2000), High Fidelity (2000), The Mummy (1999), Notting Hill (1999) Hilary and Jackie (1998), and Little Voice (1998).

In addition, I attended a series of 1996 Producers Alliance for Cinema and Television/British Film Institute seminars on issues in film production, wrote two contrasting case studies of highly successful UK films, and spent observational days with a unit during the pre-production and principal photography of the low-budget UK/New Zealand co-production Loaded (working title Bloody Weekend).

Replication for the fieldwork findings was excellent and findings were confirmed by a wide range of secondary sources.

For the purposes of this study, I based my definition of an organization on Argyris and Schön (1978) and Handy (1976). Film units are temporary formal agencies which are culturally specific and re-engineered in a unique format on each occasion that a unit is formed. They are capable of learning.

I defined temporary as a time span of less than twelve months in active production, discounting the pre-pre production stage on the basis that units only begin properly to be assembled as organizations during pre-production. However, most contract workers involved in the production process are employed for much briefer periods of time (Blair, Grey and Randle, 2001).

Producing a Feature Film

Films are manufactured in the UK through a form of extended enterprise. The people who are directly contracted to a unit for various periods of time during its active lifespan form an almost pure nexus of contract workers. Units network with a wide variety of other companies and self-employed individuals to obtain the specialist goods and services required for the feature being created. During post-production, the company's purpose is principally achieved through outplacement to individuals and organizations working under the direction of the few remaining contract workers (such as the director, producer and editor).

The London-centred industry is one of intense interrelationships. Daskalaki & Blair (2002) have referred to film production as "a form of social interaction, a mode of action and a systemic activity" (p. 19). Caves (2000) noted whereas "some creative outputs need only a single creative worker.... many, however, require diverse skilled and specialized workers.... perform[ing] at or above some level of proficiency and conformance for a viable product to result." (p. 5). This is true of film production. In such a "mutiplicative production relationship...every input must be present and do its job...if any commercially valuable output is to result" (p. 5).

Action Learning

> One thing the film business really does teach you is that the only way you
> do anything is just by doing it. So you're scared. OK. Be scared, put it
> aside, and do it! (Sue, 1996, p. 35)

The most powerful learning theme to emerge was learning is tied to action. It is the principal way in which people learn and advance within film units. Generally, freelances learn through informal on-the-job training. 50% of Blair, Grey and Randle's (2001) sample unit crew gave "on the job training as their main source of initial 'training' in the industry" (p. 10). Their study indicated that "crew members identified the people they worked with as the main source of information on new techniques; either through watching these people using techniques or being informed of them verbally. On the basis of this information they incorporated this knowledge into their own work through teaching themselves (47%)." (p. 10).

Reflecting on his experience of working on a high-budget feature, Don spoke of the inspirational effect of stimulating colleagues:

> You're working with people you've seen on documentaries. These are
> people who are experts in their field, and you are there, in alongside them,
> so you raise your level to theirs. You raise your interest and level to slip in
> with them, and I think everyone does that. (1996, p. 45)

Freelances working on film units believed that the only way to advance professionally was through informal experiential learning. Pam said, "I really don't know how I could be trained to be a production manager. You get your experience by doing the job." (1996, p. 23). Don contrasted the reputation and employability of individuals who had been observed on units to learn by doing with freelances who had academic qualifications in aspects of film or cinema, but little experience of units:

> People don't carry around bits of paper which say they can do things in this
> industry…. Even the camera department, which is the most technical

department, most of those guys have just learnt it by being there long enough. They start as a clapper loader or they start as camera tea boy and they load the magazines…. The focus puller, if he's good enough, will teach them how to pull focus and then the focus puller wants to become the operator, and they'll practice him. It's amazing, really. Yes, there are the schools...where that stands you, I'm not quite sure. (1996, pp.34 - 35)

Ann looked for opportunities to learn while she worked, through the kinds of deals she set up. She tried to work with people she could learn from:

The best [co-production deal] is with somebody...who has skills that I don't and yet I have skills that he doesn't. So it's very complementary. (1993, p. 26)

Jim stressed the crucial importance of working on freebie films (i.e. working unpaid or for low wages) such as low-budget projects that extended his knowledge when he was starting out: "Most people learn their skills on the low-budget stuff. Because they [low-budget producers] can't afford to pay the going rate, they let people do it who aren't as experienced." (1993, p. 35).

Freelance individuals expect to learn enough on a series of contracts in a particular role to break a grade and move up to the next level of work. Bob described the process:

You've got a runner who's worked with you on three or four films and you think, 'Well, they're ready, they've done all their time, and they can be a third assistant [director],' you'd push, you'd hope to say to the next film you're on, if the first assistant doesn't [already] have a third assistant, that you would put him or her forward. (1993, p. 13)

Observing others and experimenting with new skills are typical ways of learning on units. When I asked Pam how freelances increase their knowledge on units, she replied, "Watching other people." (1996, p. 21).

Bob was interested in additional responsibilities that enabled him to learn:

As a production manager, you work with different people, sometimes they put a lot more on you than you might think you should have. I like to have a lot because I like to know all the aspects: to me, it has a bearing on how I can work. If I know everything. (1993, p. 19)

Ed and his associate, M.B., used the opportunity of working together to achieve specific learning outcomes:

We wanted to polish our [management] system and test it. We reckoned we had a system which appeared to work but this was going to be the test.... It was a very useful exercise. I discovered that I probably understood more about the money tool than I thought, and we discovered a lot of pros and cons in the system that we've got. We proved that it is a good system. (1997, pp. 33 - 34)

As is typical of the sector, Don learned his way into film and television production:

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> I said, 'Yeah, I'll have a week's work.' Week's work, and I worked for that company driving all their specialist vehicles for another sixteen months…. By being on that, coming into offices and getting to know the system…. I checked on the ways of doing things and found the way in was to make the tea. Become a runner…. Pestered a production manager when I was on a film...and he promised me faithfully when he got his next job, I could be his runner. He stood good to his word, and about three months after the film finished he rang me and said he was doing a film at Twickenham Studios, I could be the runner. (1996, pp. 35 - 36)

However, the only people formally labelled learners on units are those working under the job description of trainee:

> Various departments, particularly sound, the camera, the art department, sometimes the production [office] will agree to take on a trainee. We get lots and lots of CVs sent in, people desperate to get into the film industry, who are willing to do whatever. We read their CVs and ascertain which areas they might like to get involved in and put them there. The union also have a facility for trainees [FT2]. (Pam, 1996, p. 22)

To freelances making features, it is commonplace that learning is tied to action. Any other kind of learning is considered dubious. Learning in context, not in theory, is core to film units. Learning is a hugely public activity within units, whereby learners are witnessed learning by the entire unit. People also learn with others, in groups, particularly semi-permanent work groups (SPWGs) that transfer from unit to unit when possible. Freelances in film production know what you learned, who you learned it from, where you learned it, when and why. Individuals with ambition understand that they must target the next job title they intend to hold and learn it inside out while actually doing their current lower-status job. Contract workers routinely claim to have greater skills or expertise than they actually do, having estimated that they can adequately fill the gap with immediate, rapid, on-the-job learning. Highly experienced freelances learn by observing how other people do things, perhaps in settings other than film units, and modifying their own approaches. Ed and M.B. actually used the opportunity of working together on a unit to try out a new approach they were developing: they planned, conducted and evaluated a learning experiment.

Problem Solving

> Basically, the job is just problems, that's what the job is, the problems and the solving of them. (Don, 1997, p. 4)

People working on units see the particular problems inherent in making feature films as principal attractions of their jobs. Problem solving was a strong learning theme. The ability to solve problems quickly and resourcefully is highly valued in units, and often requires sophisticated individual and group learning skills.

Ed wanted to become a producer so that he could have more exciting problems to solve:

> People are encouraging me to develop towards producing and mentally there are more interesting, more satisfying challenges in dealing at that level of problem solving. (1997, p. 34)

A number of participants mentioned how much they enjoyed the intellectual challenges inherent in their jobs: "What I like about filming, every film is different, and you're learning something different from it, from every one." (Bob, 1993, p. 26).

Sue spoke about rising to the challenge of action learning in the context of solving an urgent, complicated transport problem:

> Finding an answer to something that you've never come across before.... It's also having to make things work. It's really exciting, this part.... I had to phone up the ferry, who we didn't have an account with, who didn't know us from Adam, and persuade them that they were going to take all these vehicles, I had to find a cargo ferry that went at the right time and so, from Hamburg, I had the transport company on one ear, they were getting all their guys in, and getting them on the road, as I was trying to persuade the ferry company to get them across the water. And that was just such a buzz! It's that kind of thing in films that keeps me coming back. (1996, pp. 6 - 7)

She told of increasing her own knowledge to avoid creating problems and to improve her problem-solving abilities:

> I put a lot of effort into making sure I understand what I'm dealing with, because it's useless negotiating a truck for camera equipment when you have no concept of the size or the weight or the requirements which that [particular] camera equipment needs to work well for that department. You're constantly finding out more about how each department works so that you can do your job better. I spend a lot of time talking to Kodak, understanding the processing of film so that when there's a problem with the rushes, I have some understanding of where the potential problem could be. Is it a magazine fault, is it something to do with the batch of film that they're using, is it a lab problem? The more you can teach yourself about all these different things, about the way it works, the better you can do your job. (1996, pp. 19 - 21)

Problem solving skills are crucial to the unit's work. Individuals are expected to take the initiative in solving what problems they can, as decision making is routinely pushed down to the lowest possible level. For example, there are problems that the production office never gets involved with:

> It's organic. That's the great thing…. Because there have been a dozen problems that afternoon that have been solved [on the floor]…. Production office know nothing about it…. Actually [don't] need to. (Ed, 1997, p. 29)

Kay (1996) pointed out that there are potential problems in every budget line: most of these are identified during pre-production and headed off; the remainder are dealt with on a fire-fighting basis. A problem mishandled can have expensive or even devastating consequences. Ann mentioned the pressure of keeping on top of problems during production: "You're constantly trying to redress problems as they happen and make sure they don't happen later on, and analyse why they did [occur], and nip things in the bud." (1993, p. 48).

Reflective Practice

> I don't sit down and make notes about what I've gleaned…. I just hope I remember it…. I'm not sure that I always do, no. (Tim, 1996, p. 19).

Hirschmann (1964) said "merely expecting progress does not bring it about" (p. 137), and Garvin (2000) highlighted the necessity of structuring reflective practice: "Learning from experience is an active process. Improvements must be carefully and consciously managed. There is nothing automatic about the resulting gains." (p.99). Reflective practice formed a shadow learning theme, as it was undeveloped in the sector. Freelances prone to analysis did consider learning outcomes to some extent, but without benefit of theory or models. Everyone else simply moved on to the next contract.

In speaking of how the experiences of a unit are assessed after the completion of a film, Jim said:

> Some people take a stab at it. Ann once did the budget in retrospect of [film], just to see what she'd estimated and what actually happened. But that was just out of interest, she doesn't do it on everything.... I sometimes come away thinking, 'Well, that's something I've done now, that I know about.' I never sit down and think, 'This is what I learned!', but I do come away with the feeling that I've conquered something. When I did [film].... I came away from it confident that I could move a unit around the world. (1993, pp. 43 - 44)

Don placed limited value on assessing projects after completion, believing that each film presented a unique set of challenges which were unlikely to be replicated:

> I look back, and I look at incidents or times or costs or problems that occurred along the way. Each show is so different. There's no two the same. Because people are never the same. Crews are never the same. Individuals run their departments separately each time. There's not one set system...just working with so many hundreds of people throughout a year. (1996, p. 38)

Sometimes Sue drew on shared learning experiences:

> If I've worked with someone before, we'll say, 'Oh, we did it like that on [a previous film].' [Tim] I work with a lot, I did [film] with him. Our discussions on the ways we've done something before and, if it worked really well, we could do similar to that [on this occasion] or if we didn't like the way it worked, well, 'Shall we try it another way?'…. I have three, four people that I could work with on a regular basis, but, like with [Tim], I might work with him on a film every two years. (1996, p. 28)

Ed consolidated the positive aspects of his experiences in order to capitalise on his learning. He gave an example of learning a budgeting technique on a previous unit and then networking with the producer from that film, who acted as a mentor, enabling Ed to consolidate his new financial skills. Rehearsing his learning, Ed produced an improved budget for his new unit:

I phoned [the producer from Ed's previous unit] and said, 'How do I do that?' and got various lectures from him on how to do this and to do that.... While we were fire fighting on [his previous unit] I was aware that I was being shown how to do these things, and I just used that bucket of water that day [to produce a new budget]. (1997, p. 30)

In considering the development of his career, Don made a direct link between learning to spend well (despite constant pressure to reduce costs) and professional success:

Everybody slaps you on the back, the filming's great. 'Well done, Don.' All back to the office, and the accountant says, 'Look how much you spent!' I said, 'Yeah, but we got it.' 'We can't afford [that much].' I said, 'Sorry, go and see them down there, because they were slapping me on the back just a minute ago. You can't suddenly change it.'.... Listen, if that camera crew turns up and they can't shoot, then you've got problems. That's a lot of money. All the time that crew's running, all the time those trucks, especially when moving around London...teams of people, the bagged-off meters and securing yellow lines and keeping an eye on the traffic.... It's only a twelve hour day you're dealing with. The time soon runs out. The way film schedules are put together, you've just got to keep moving forward. The moment you stop moving forward, it costs the company a load of money. I've always been a great believer in spending well to achieve the aim, and it's always paid off.... I don't think I've ever been under-budget. Not for the want of trying, but it [location managing] demands so much.... People just see what your achievements are, or whatever the CV reads and yeah, there's some good stuff in there. Maybe if I'd held back here, there and whatever, maybe I wouldn't have achieved that. Maybe I wouldn't have lasted. (1997, p. 10)

Ed reflected on his learning over the previous few years, and knew that it had changed him:

I wouldn't employ the me of four years ago. I'm probably being hard on myself but I'm very conscious of having improved in my assessment and decision making [abilities]. With confidence comes kindness. People tend to reach a point in this business when you're pushed into a situation...you're constantly being pushed to the edge. If you're confident at that edge [fine], when you're not confident, that's a nightmare. (1997, p. 15)

In film units, practical outcomes are paramount. Management are only interested in learning in so far as it enables a unit to meet immediate goals. They are not prepared to fund activities that will not benefit their own unit, and thus reflective practice is of no interest. I asked Jim, a production manager, if he ever gathered units together at the end of principal photography to discuss what had gone well and what could be improved on future units. "What?" he asked, "And pay everybody for an extra half day? Not bloody likely!" (personal communication, 1992).

Unit Systems

Knowledge cannot be retained within a temporary organization. Knowledge is retained by individuals and work groups, and embedded in industry-wide systems and practices. As

freelances and SPWGs move from unit to unit, their tacit and explicit knowledge transfers with them to the benefit of their new units and colleagues.

Units are instantly created without physical records, existing employees, or plant. Freelances and SPWGs cluster. Relying on groupwork skills, knowledge created or acquired on previous units, and a key document, the script, they immediately bring into being, through high-speed networking and mental models shared throughout the industry, the temporary organization that is a film unit.

Ann said,

> The script is the bible. It is passed through a lot of different hands and all the information for the shoot is broken down from this thing, broken down in different ways by different people. Everyone has their own system of coding.... It's the DNA of the [unit]. (1993, p. 12)

Daskalaki and Blair (2002) cited Mangham (1978) in arguing "scripts can become carriers of socially constructed meaning or 'relatively pre-determined and stereotyped sequences of action which come into play by particular and well-recognized cues or circumstances [of] which we acquire knowledge through the process of socialisation.'" (p. 9).

UK film units operate a variety of standard procedures centred on core documents, of which the script is one. The schedule, the daily call sheet, and various reports which enable, and sometimes require, individuals to co-ordinate with others inside (and outside) the unit are also key. Freelances are expected to appreciate their own responsibilities as well as the contributions that others make. Set routines and expectations are helpful in bonding freelance workers together in familiar patterns of work, and these routines and expectations facilitate networking:

> You book sixty individuals [as unit crew] and you...give them a schedule. They all turn up, they get out of the car and they have breakfast and the first assistant says, 'Right, we've got to have a track from here to here.' And the grip turns up with the track, dolly comes out, the camera arrives, and, 'Hi, I'm the driver.' 'I'm the grip.' 'I'm the chippie, I'll level that for you,' and it just happens. It's extraordinary. (Ed, 1997, pp. 32 - 33)

Units cultivate an expert culture. There is a negligible communal knowledge base. Ed, a manager, explained how he relied on departments for specialist guidance:

> Many of the [departments] like camera, sound, lighting, costume design are so specialised…. They know more than we [in the production office] do…. I mean, the phone goes, the camera trainee is on the phone saying, 'We've got to have a matte black alloy three quarter inch three spin focus lever.' Now, that might be for sports car of the week. Don't mind me, I don't know! (1997, p. 12)

It is generally acknowledged that each department, and every individual within it, has professional networks and knowledge which are made available only as and when required. Knowledge is to be had on a need-to-know basis. Expertness is vital, but there is no interest in centralising expertise. When I asked Jim (1993, p. 42) how individuals contribute to the

knowledge base of the unit he replied, "Everybody brings specialist skills…. We don't all pitch into a central information source." (p. 42).

Participating in the work of unit departments other than one's own (except for production office staff, who are understood to have a particular need to know across the organization) is seen as contaminating of one's professionalism. Cross functional roles are "not usual, because people want to be known as doing something [specific].... Whereas, if they seem sort of messing [about], people don't use them, because they want a specialist." (Ed, 1997, p. 24).

The Production Office

> The production office is a main base. Central core.... Everything that I co-ordinate or put together is done by that office. And then the whole [unit] is aware what I'm up to via that office. She knows where I am, twenty-four hours a day. And what I'm up to. Yeah, it's the main point. Even when the office shuts, we know that the co-ordinator will know.... Central control, it's where all the information goes to, from. Where I put it into and where I receive it from as well. (Don, 1996, p. 38)

The production office performs an important knowledge management role for the unit, acting as the hub of a range of networks and a centre for the integration of information. Individuals working in the production office are units' specialist communicators and networkers. They collectively ensure that communications systems are appropriate, operational and effective. They conduct research for their own areas of work and for other departments.

Sue explained how she co-ordinates information, and why it is important that production office staff understand, in detail, various unit arrangements. In this extract, she refers to knowledge management:

> The information is changing hourly and has to be re-issued and everyone has to have the most up-to-date information all the time. You're dealing with between sixty to one hundred and fifty people who need this information….
> You have your schedule [for a particular scene]...they will need ten extra portable make-up mirrors. If there's a crane on that day, I'll need an extra grip who needs to travel, have accommodation, needs information.... Now there's a schedule change, and this scene moves to a different spot [location]. Well, I need to be able to know that the scene has all those different elements which are in addition to what is already going on, that all of those people know it has changed, that I know when I need to bring them down, that they have the information they need and that they have the accommodation.... It's juggling with a huge amount of balls, and it's quite exciting. (1996, pp. 26 - 27)

How Film Units Learn

> Learning and knowledge accumulation are not outcomes, but paths that lead to outcomes. Thus, looking for evidence that a project team has stored

> its knowledge somehow may be the wrong model in learning and knowledge assessment. (Anell & Wilson, 2002, p. 184)

UK film units, which are temporary by design, are efficient learners, and knowledge communities. The value of individuals and services to any unit that contracts them is in direct proportion to their ability to learn, and to their professional and personal networks within and outside the unit.

Units do not preserve physical systems. Scripts, budgets, schedules, call sheets and daily reports all form part of a technical system which has been developed by multiple experts over time on a variety of temporary units. These systems and procedures are embedded in the film production sector, in the work experiences and life experiences of freelances, and they underpin film production. A single unit has not developed them, although they are expressed, tested, refined and refreshed through being used in successive temporary organizations. Changes, improvements and innovations to industry standard procedures become part of the mental model everyone who has worked on a given unit carries away and draws upon on subsequent occasions. Daskalaki and Blair (2002) point out "when these teams are dismantled, their knowledge is redistributed in the social-communicative environment in which they operate ('industry spaces')." (p. 16). Freelances in film production have the crucial ability to interpret sector stories and metaphors because of their deep understanding of underlying systems.

Although units create, acquire, interpret and transfer knowledge and use it to change individual and unit behaviour, knowledge cannot be retained within a temporary organization. As noted previously, temporary organizations leave contract workers, rather than the other way around. Knowledge is retained by individuals and embedded in industry-wide systems, practices and roles. Knowledge is also embedded in films themselves, which function as archival documents with respect to the production processes through which they were manufactured.

As freelances move from unit to unit, their tacit and explicit knowledge moves with them, to the benefit of their new employers and colleagues. People on units learn together as they work together. The ability to work as part of a team is central to working on film units for freelances and for suppliers. In film units, notions of key skills and core learning are linked with teamwork skills and experiential skills gained on previous units.

Intangible assets are not only non-codified subject or technical knowledge. Access to networks, also intangible, is vital. Units arise and disband, but networks endure. Freelances are absolutely dependant on internal and external networks. These are uniquely collaged configurations developed over the course of a career, although there are also shared aspects. Connections which initially form within units during internal networking often become enduring relationships when parties no longer work on the same unit, transferring to the external network category.

Systems, and systems approaches, provide armatures that enable rapid learning in film units, allowing strangers to work together immediately and effectively. Learning is embedded in film systems, as well as within individuals and work groups. However, systems thinking can underpin serious problems in film units: for example, generally unsatisfactory attitudes to health and safety (Ludwin, 2004).

In addition to the individual identities film units demonstrate, the UK film production sector as a whole is a system with an ongoing identity, which is created through its theory-in-use (Argyris & Schön (1978, pp. 12 – 13). It functions as a meta-holding environment for knowledge, with

networks, SPWGs and units being macro-holding environments and individuals representing the micro end of the continuum.

Conclusion: Uk Film Units are Distinctive Knowledge Communities

The value of freelances and service providers to temporary organizations such as film units is in direct proportion to their capacity to learn, to know and to operationalize their knowledge. Every unit has three assets: its contract workers and suppliers, its script, and the funds secured to realise that script. Each element has networking implications, and draws on embedded systems and routines. Alliances and networks are key in film units. Freelances learn with and through such connections. In addition to personal learning, there is group learning, unit learning and network learning.

The combination of being temporary and producing cultural texts conditions most aspects of organizational life and style in UK film units. Unique knowledge communities, they are an extreme and idiosyncratic form of temporary organization designed to maximize high speed, high pressure learning in climates of radical change.

Acknowledgements

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