

# **Deepening our Understanding of Human Service Organizational Technology**

Jodi R. Sandfort  
Associate Professor  
Humphrey Institute of Public Affairs  
University of Minnesota

October 2007

Paper for presentation at the 9<sup>th</sup> Public Management Research Association Conference  
University of Arizona, Tucson, October 25-27, 2007

Please direct questions to the author at [sandf002@umn.edu](mailto:sandf002@umn.edu) or 612-625-3536.

Within organizational studies, scholars developed the concept of ‘technology’ to refer to the work done within organization. While common usage of the term now denotes new innovations in computer systems, hand-held organizing tools, or new web-based innovations, organizational theory highlights the importance of a many different tools, techniques and actions in carrying out the central work of organizations. Organizational technology is the process used to transform inputs into outputs (Daft 2006; Goodman and Sproull 1990; Scott 1981; Hulin and Roznowski 1985). Inputs, often conceptualized as raw materials, can be people, other living things, material resources, objects, or symbols. Similarly, outputs can take many different forms. If organizations are recognized as systems for doing work, organizational technology is their central, defining characteristic (Perrow, 1967; Hulin and Roznowski 1985)

Within manufacturing organizations, it is not difficult to specify the core technology. Raw materials can be seen, measured and analyzed. Tasks important in the technological process can be standardized and evaluated. In fact, within private-industry, the whole field of operations management provides concepts and tools, such as supply-chains and project management, to analyze and improve an organization’s technological processes. Exposure to operations management is a key competency also stressed in most business administration training programs.

In contrast, there is a surprising dearth of attention to defining, discussing and understanding the technology of human service organizations. In part, this is because this process is much more difficult to define and enumerate. The primary raw materials – clients – have diverse characteristics and motivations. The programs and tasks important in their transformation are changeable, often requiring professional judgments that are difficult to predict or standardize. The execution of programs often require many different elements be dealt with

simultaneously and services often are simultaneously produced and consumed (Scott 1981). In fact, some argue that human service organizations – such as mental health clinics, child care centers, welfare-to-work agencies – employ technologies that are inherently indeterminate, ambiguous, and complex (Hasenfeld & English, 1974; Hasenfeld, 1983; Weaver, 1999; Nuehring 1978; Savage 1987).

There is, of course, important variation among the technology of human service organizations (Hasenfeld 1972). Some organizations have technologies intent on processing people. In these organizations, work focuses on controlling access to a range of services, such is demonstrated in university admissions offices, credit bureaus, or welfare organizations (Hasenfeld 1978; Prottas 1979). Core tasks focus on classifying clients, linking them with external resources, and disposing of cases; as a result, the duration of the intervention tends to be fairly short. Other human service organizations employ technologies that attempt to change people. The tasks of these organizations, such as mental health clinics, child care centers, or schools, focus on providing treatment, education, or socialization that alters the physical, psychological, social or cultural attributes of clients (Goffman 1959; Vinter 1963; Willis 1977). Because, in these contexts, staff play critical role developing and deploying treatments, the moral categorization of clients may determine the types of services they receive (Roth 1971; Pessa 1978; Hasenfeld 1992; Schneider and Ingram 1993; Soss et al. 2001). In both settings, those with “people processing” and “people changing” technologies, the interactions with clients are central to program implementation. Services cannot be stored or inventoried but rather are enacted through staff and client interaction.

One key question of scholars interested in better understanding organizational technology is its relationships to structure (Fry 1982; Hickson, Pugh, and Pheysey 1969; Lawrence and

Lorsch 1986; Mohr 1971; Savage 1987; Shrader, Lincoln, and Hoffman 1989; Barlay, 1990; Glisson 1978, 1992; Perrow, 1967; Scott 1981). Organizational structure is the coordination mechanisms that enable work to be done (Perrow, 1967; Scott, 1981). Originally, based on Weber's bureaucratic theory, structure was conceptualized as that which created specialization, standardization of tasks, formalization, centralization (Pugh et al. 1968). Within human service organizations, organizational mission, hierarchy, departmental arrangements, and intra-organizational task forces are examples of what researchers see to be structural elements. Structure also includes many functional management areas, such as finance and accounting, human resources, facilities, or program assessment and evaluation, that support the accomplishment of program work (Scott 1981).

Contingency theory suggests there is a predictable relationship between an organization's technology and structure and considerable research explores this relationship (Daft, 2006; Glisson, 1992; Lawrence & Lorch 1986; Perrow, 1967; Scott 1981). Yet, while some scholars argue that structural characteristics predict technological variation, others contend that variations in core technologies predict structural forms. Empirical results reveal ambiguity in the relationship between structure and technology, ambiguity in how to differentiate them from each other and understand their relationship (Adler and Borys 1996; Barley 1986; Mohr 1971; Glisson, 1992). This stream of research is unable to conclusively explain why similar organizational technologies could be carried out in difficult structures or why similar structures often surround distinct technologies.

This intellectual impasse has not stopped the development of a rich and vibrant field focused on understanding the technology of private industry. In fact, in this arena, there is growing attention to the "duality of technology." (Orlikowski, 1992). Rather than being the

product or cause of structure, some scholars direct our attention to organizational technology that is simultaneously produced by and constrained by human action (Barley 1990; Weick 1990; Orlikowski 1992; Roberts and Grabowski 1999; Pozzebon 2004; Yanow). To explore this idea, they engage with the work of social theorists (most notably Bourdieu 1990; Giddens 1993; Latour 2005) who grapple with the relationships between macro-structures and human agency.

In this chapter, I explore the implication of this line of scholarship for understanding of the work of human service organizations. I do so for theoretical and practice reasons. As others have noted (Borden 1992; Emirbaye and Williams 2005; Rino 1985), our understanding of social welfare administration can benefit from a more deep engagement with sophisticated theories. The theory which informs this analysis is particularly relevant to social welfare for it grapples with understanding how human activity – insight, innovation, meaning, leadership – creates and is constrained by larger, structural forces. Research with front-line human service professionals or managers reveal considerable insight and energy being spent on program delivery and refinement. Yet at the same time, their actions are often hindered by larger structural forces such as organizational rules or public policy. How can this theory help us better understand this empirical reality?

Practically, it also is essential for human service professionals to better understand the work of our organizations. Although technology is often seen as a “black box,” there is much to be gained from refining our conceptual understandings and descriptive tools. In human service organizations, program refinement is too often driven by external funder requirements rather than close analysis by program staff. Letts and colleagues (1999) describe this as the dearth of program capacity within nonprofit organizations. Yet, the capacity to understand, monitor and refine program elements is an important dimension of organizational effectiveness (Sowa,

Selden, and Sandfort 2004). This is particularly true because human service technologies are often intensive and reciprocal; the inputs and processes used are often inter-dependent and require a high level of coordination and management to benefit from the synergy. The concepts and tools discussed here provide a means to make visible and improve an organization's program technology, thereby improving overall organizational effectiveness.

### **Modeling Program Technology**

A number of characteristics differentiate the technology of human service agencies from other organizations. For one, many times the treatment methods and intervention techniques in use are often not based upon scientific understandings of the presenting problem (Rossi 1978). In part, this is because there is often little definitive research that guides the development and deployment of many interventions. Instead, the practices of program staff and managers are often informed from knowledge developed from years of day-to-day service delivery, providing counseling, educating children, verifying eligibility for welfare programs. There also is pressure from funders and others in the external environment to adopt techniques and tools used by other organizations whether or not they are based upon documented evidence of effectiveness (Zucker 1987; DiMaggio and Powell 1991).

Secondly, there is considerable complexity when working primarily with human beings who are the raw materials of the organization's process (Hasenfeld, 1974, 1983). Because people have distinct attitudes, motivations, and goals, they rarely passively accept the imposition of an organization's treatment protocol. Instead, the technology is often negotiated through day-to-day interactions between front-line workers and clients. Often, organizational staff and clients experience conflicting goals, unequal knowledge, and contested control (Rosengren and Lefton 1970; Hasenfeld 1978; Lipsky 1980; Handler 1992; Meyers, Glaser et al. 1998; Sandfort, Kalil,

and Gottschali 1999). Yet, paradoxically, both parties are mutually dependent upon each other. Staff depend upon clients to focus their work efforts, to provide feedback about their practice techniques, to respond to offered treatments. Clients depend upon staff to provide the services they are seeking.

Finally, in private businesses, slippages in organizational technology decrease productivity and efficiency, both central concerns of management. In human service organization, managers' attention is often are focused on securing and maintain the resources necessary to carry out programs rather than insuring productivity and efficiency (Letts, Ryan, and Grossman 1999; Meyer and Rowan 1977). With the increased role of government as a funder of many human service organizations, the process of securing and managing resources can become extraordinarily complex (Gronbjerg 1993; Smith 2005). Each funding stream carries with it rules, reporting requirements, and fiscal constraints that must be reconciled and managed. Organizations are being required to document the "outcomes" of their intervention from increasingly diverse sources. Managers must grapple with the constant tension between deepening program expertise and developing new programming ideas to engage private funders' interest. Yet, to improve program effectiveness, managers must work against these forces, using tools and techniques that help assure their limited resources are applied in ways most likely to affect clients' circumstances.

One source of tools is the well-developed field of business operations management which focuses on managing processes that create products or services. Courses in operations management are required by most business administrations programs, along with finance, marketing, and strategic management. National and international journals publish research in this area and professional associations regularly host conferences for researchers and practitioners.

Mathematical models are used to assess work process, manage supply chains, and assess quality and performance. Management information systems provide the computer infrastructure to gather and process data. Some of these concepts can be applied to the work of human service organizations; however, as the unique characteristics of human service technology attests, direct application of many tools is challenging. Because the transformation process is indeterminate, human service organizations can't merely track the time associated with each step in most treatment processes and assume it will lead to effectiveness. Because the client 'raw material' is changeable, the tasks in the process can't often be standardized and closely monitored to assess fidelity (Savage 1987). Because establishing and altering program technology is often dictated by public policy or other external factors, we can't assume that organizations operations can be isolated from these forces. Those drawing too closely upon private-sector notions of program delivery, overlook these essential differences and promote practices that aren't likely to be effective (Jaskyte and Dressler 2005).

There is, however, a simple tool developed from private-operations management that aids in the communication about the complex technological process of human service programs: process diagrams (Bresnen, Goussevskaia, and Swan 2004; Duffy and O'Meara 2002) These diagrams, a standard tool of project management, create visual representations that capture the steps and sequences involved in program delivery. They also can illustrate the intensity and duration of services and the points of referrals to outside services. Figure 1 demonstrates the use of such process diagrams in delineating the technological process of two types of human service organizations – welfare-to-work providers and early childhood education programs.<sup>1</sup> At the time of the field research, welfare-to-work organizations were largely *people processing*

organizations. Public policy mandated contractors to focus on finding jobs for welfare recipients and developing work skills through a ‘Work First’ model, rather than providing education or training (Brown 1997). A successful outcome was locating minimum wage employment for welfare clients for at least twenty hours a week. In contrast, preschool providers employ a more fundamental *people changing* technology, supporting four-year-old social and emotional development so children can succeed in school. Public policy encouraged high quality education and care that enabled parents to work and provided additional health and family support services. Figure 1 represents how public policy makers conceptualized welfare-to-work and early childhood education program implementation.

-- INSERT FIGURE 1 --

Each Figure illustrates how program technology within human service organizations can be represented. Each captures the mechanism whereby the client enters the program. In the welfare-to-work example, client referrals are made from the same county welfare office. In the early childhood example, children are continuously enrolled at the beginning of the program year. The diagrams also denote the various program tasks experienced by clients and mandated by policy directive. In welfare-to-work, all organizations must do orientation and “job search” support to encourage those who can get work to find it. For those who aren’t successful, they must have access to other focused program activities. The diagram also helps to illustrate how, throughout the process, clients must comply with the 20 hour a week requirement or risk referral back to the county welfare office for punitive action. In early childhood education, the core program element is classroom instruction, although public policy requires they be supplemented

---

<sup>1</sup>These illustrations come from two field-based studies of human service organizations. See Sandfort (1997) and Selden & Sowa (2004) for more details about each research project.

by child assessment, health services and family support. Such diagrams provide a simple way to communicate with diverse audiences about program parameters (Bryson et al. 2004).

However, in the tradition of operations management, such tools can also be used by program managers to better understand program technology as it is being implemented. Often knowledge about human service technology is found in the minds of frontline staff or supervisors, many who develop their ideas through years of daily practice, counseling those in need or educating young children. Too often, these insights are not elevated from individual experiences and, instead, staff find themselves working against established organizational practices (Lipsky 1980; Vinzant and Crothers 1998; Yanow). These process diagrams provide a tool to help managers formalize front-line knowledge and transform it from individuals' experience to organizational practices. They can assist in purposeful program planning, ongoing management and program refinement, and to build overall competency (Waddell 2005).

-- INSERT FIGURES 2 & 3 ABOUT HERE --

Yet, this simple tool can also shine the light into the black box of organizational technology and reveal variation of interest to researchers. Figures 2 and 3 illustrate the implementation of program technology in three organizations examined in the welfare-to-work and early childhood studies. In both examples, although organizations were implementing the programs under the same policy mandates, each organization interpreted these mandates differently. In the welfare-to-work case, organizations were given latitude to develop their own approach to 'work first' and their effectiveness was determined by the number of clients they moved into employment. A statewide study of 100 welfare contractors system at the time, found there were four distinct models being used (Seefeldt, Sandfort et al. 1998; Sandfort 2000). The managers of organizations represented in Figure 2 all reported they were operating a "job

seeking support” program; however, actual observation of daily operations revealed significant variation in the technological process which directly influenced the organization’s achievement of policy goals (Sandfort 2003). In the early childhood education example, organizations were given more specific program requirements than the welfare-to-work organizations. Yet, as Figure 3 illustrates, there was still significant variation in the program process actually used

In many respects, these field-based examples support assertions that human service technology is inherent indeterminate. Contested goals, insufficient technical knowledge, and resistant clients leads organizations to develop various processes. Staff craft interventions that might not be plausible connected to achieving the desired policy outcomes. Yet, for those interested in improving the connections between the work of human service organizations and desired societal goals, many interesting questions are raised by these examples. In the face of the ambiguous connection between many interventions and desired outcomes, how is human service technology developed? How do staff have the means to direct their daily actions in consistent ways? How do they sustain this activity over time and what inspires them to change program technology? What alternative explanations exist for the cause of the variation we see among organizations operating the same program within the same policy environment? To answer such questions, we must move beyond practice-based tools to the realm of social theory.

### **Enhancing our Theoretical Understanding of Human Service Technologies**

As alluded to earlier, most initial research about human service organizational technology conceptualized it as objective force that would determine or be determined by other organizational attributes, such as structure (Hasenfeld 1972; Hage and Aiken 1974; Glisson 1978; Savage 1987). Informed by organizational-behavior’s attention to individuals, another stream of research focuses upon individual discretion and the institutional contexts that are

important to front-line, street level “bureaucrats.” (Roth 1971; Meyerson 1991; Lipsky 1980; Smith and Donovan 2003) Institutional theory stresses the explanatory power of organizational environments (DiMaggio & Poweell, 1991; Zucker, 1977; Barley and Tolbert 1997) and suggests that most human service organizations face circumstances where there is great pressures to decouple core organizational technology from other structuring forces (Meyers & Rowan, 1977). Rather than attending to program delivery, this theory posits that organizations gain legitimacy, power, and resources by mimicking structural elements, such as financial management metrics, human resource practices, marketing or fund development. In this frame, the success of an organization is likely to be determined by how well they appear to be delivering services, rather than the actual processes used in their core programs. This emphasis – and the popularity of institutional theory as an tool for nonprofit analysis – had lead to a gap in scholarly attention.

While human service organizations do face incredible pressures to legitimate the organization in the environment, program technology must not be overlooked. For one, the transformation process is the distinguishing aspect of a human service organization – it is the way the organization tries to influence, help, support the people it is serving. It is the mechanism the organization uses to contribute to socially desired outcomes. Secondly, institutional theory overlooks the real agency people demonstrate in attempts to constantly improve their organizational service delivery (Barley and Tolbert 1997; Fligstein 2001). Managers are not passive adopters of prevailing ‘best practices’ in human resource management or communications. Rather, some are thinking, testing, adapting individuals who try to align these structures with core work. Finally, the performance management movement is increasingly requiring that human service organizations document how their programs are contributing to achieving socially desired outcomes (Barzelay 2002; Moynihan 2006). This environmental

pressure requires that scholars develop more theoretically-informed understandings of how organizational technology is actually enacted.

For more robust explanations, we must look to social theories exploring individual agency and social structures. This is, in fact, one of the most troubling issues in social theory: how are the actions of individuals related to the structural features of society? Rather than assuming either the deterministic viewpoint of structural functionalists (Parsons 1956) or the relativistic viewpoint of phenomenologists (Garfinkel 1967), a body of theories tries to bridge address how humans exert agency within social settings (Ritzer 1992). Some explore these concepts using the concept of structuration (Giddens 1984; Giddens 1990; Whittington 1992; Sewell 1992): Others, such as Latour (2005), conceptualize it as actor-network theory that focuses attention on the unfolding process of interactions, through which people continuously must reassemble the social in order for it to exist. Bourdieu (1990) discusses it in relation to habitus and strategies of action among differently situated actors.

Although social theorists stress what distinguishes these bodies of thought, for our purposes here, it is important to see what they share. For one, they all focus attention on *social context* as site of scholarly inquiry. Rather than assuming that context can be captured as discrete variables and controlled for in predictive models, they push us to move away from the dominant social science paradigm seeking to document causality ultimately through grand theory. Instead, they suggest that social science can be most fruitful if it takes as its central premise the need to lend deeper insight into the social. As Latour states (2005: 13), social inquiry would be more fruitfully understood as “...a science accounting for how society is held together, instead of using society to explain something else...”.

Secondly, these theories also have significant implications for the *conduct of empirical research*. They all draw attention to the role that both people and nonhuman forces play in the creation of social structures. While they each have different terms – Latour’s Actor Network theory prefers “actant,” while Giddens’s structuration theory prefers “resources” – each acknowledges the way tangible artifacts can help shape social interaction and fundamentally shift them. To continue provide insight into the operations of social systems, the concepts, words, ideas of those being studied should remain more significant than the analytical categories of social science. Rather than “subjects” of scrutiny and interpretation, “informants” must be recognized as skilled social actors whose way of thinking and being reveals much about the social setting they both operate within and create. Through attending to their knowledge and experience within the context, empirical research can shine lights inside of processes that are now, too often, understood as ‘black boxes.’

Given our interest in the ‘black box’ of human service organizational technology, this theoretical tradition holds much appeal. Whereas some research focuses on identifying program ‘models’ that had key components and assessing the fidelity of subsequent implementation (Blakely 1987; McGrew et al. 1994), these theories suggest that program delivery is not an ideal to be discovered and instituted. Predictive models provide little insight because program implementation does not occur systematically. Instead, to understand the variation illustrated in the welfare-to-work and early childhood organizations in Figures 2 and 3, we must examine program technology as a process, accomplished by the social actors who make decisions that are supported or refined over time. We must grapple with the relationship between human agency and social structures. Through such inquiry, we can develop insight and a more generalizable

way of understanding how organizations operating the same program in the same policy and environmental contexts develop such distinct core programs.

While concepts from any flavor of this theoretical tradition could be used to analysis organizational technology, let us focus on the work of Anthony Giddens whose work has been widely used in organizational studies of private industry. In Giddens' terms (1984, 1993), the social contexts in which people find themselves are considered their "social systems." Social systems do not inherently possess structure but rather are structured by people to organize and understand their actions, to make sense of the circumstances in which they find themselves. Like the other theorists operating in this vein, Giddens believes humans are knowledgeable about the conditions within which they operate. We do not passively respond to structural forces; we possess the ability to alter the social structures that shape our lives because we are skillful agents. Our skill lies in the implicit knowledge we possess about context, about our social systems (Fligstein 2001).

Giddens' analysis focuses on the "rules" and "resources" of social systems. "Rules" are the virtual norms or conventions of social life and they exist on multiple levels (Giddens 1984). The deepest are those used in the replication of societal institutions, such as language, time or marriage. On another level, rules convey the norms of social interactions, such as greetings, relaxed conversation, or heated debate. On still another level, rules are the knowledge that people develop when operating within a particular context, such as an organization. Rules at this level become important to our discussion of human service organizational technology. Rather than being formally written or stated, social rules are informal and implicit. They are the knowledge that people develop out of experience and practice and share with each other during routine actions. As such, they are the deepest level of organizational culture, the underlying

assumptions, that guide collective work (Riley 1983; Schein 1990). Rules provide a shared background of mutual understanding to allow us to orderly exist in social contexts (Ranson, Hinings et al. 1980).

For Giddens, “resources” are anything that serves as a source of power in social interactions. They include human attributes, such as physical strength, authority, or knowledge. They also include concrete objects, such as budgets, formal plans, and tools, such as process diagrams representing technology, that can help accomplish the work at hand. Resources both exist within social systems and can be brought in by members. In terms of human service technology, resources can be critical important in determine how core processes are developed and carried out.

Giddens’ theory posits that by drawing upon the salient rules and resources of a context, individuals actually create the structure of their social systems. Usually, this structuring is unintentional. People regularly use normative standards and conventional beliefs to interpret experience, not questioning whether these standards should apply in that particular instance. By routinely adopting dominant schemas and drawing upon resources in ways that support those believes, their salience is reinforced within the social setting. They become structural. This structure, in turn, provides a shared way of interpreting events, understanding experience, and convey appropriate behavior. So although structures emerge from social process they, in turn, limit the range of plausible actions in that context because certain options become irrational.

Yet, structures are not objective forces that provide only one way to understand experiences or dictate one possible course of socially acceptable action. Social structures are subjective. Because they emerge from social processes, people also can always recognize and exert their own agency to change them. Because they are the outcome of human choices and

actions, they can always be changed. Sometimes change is unintentional. Yet, Giddens believes that people can introduce new rules and resources into social systems which – if deployed strategically – can alter the very structure itself.

In business schools, scholars have turned increasingly to structuration theory because it offers a way to reconcile a deep divide within organizational studies. On the one hand, traditional organizational theory has stressed large structural forces and explored predictive models about the relative influence of different structural features. On the other hand, strategic management, which forms the core of most business school curricula, stresses the power that individuals have in making strategic choices and shaping context. A way to bridge these traditions, and look for insight between “the dichotomous logic” (Pozzebon 2004, pg. 247) is found through the use of structuration theory. In fact, while Giddens’ structuration theory was used during the 1980s and early 1990s (Whittington 1992), research has exploded since 1995 (Pozzebon 2004). Scholars studying marketing (Vallaster and de Chernatony 2006), financial management (Joseph 2006), product and management innovation (Jones, Edwards, and Beckinsale 2000; Keegan, Coopey, and Emler 1998), project-management and technology (Bresnen, Goussevskaia, and Swan 2004; Orlikowski 1992), human resource management (Haugen 2006), and management choices (Sarason 1995; Stones 1991) use this analytical framework to provide insight and guide empirical research.

Within social welfare, there exists a similar – yet less explicitly articulated – “dichotomous logic.” Much social welfare scholarship focuses on trying to isolate the social factors – such as race, class, gender – that predict certain individual outcomes. This tradition is embedded deep within much of current social science and also is used in the research about human service organizations. Yet, this line of research, which focuses exclusively on the

predictive social structure” of society, does not often provide much insight into the outlier cases, those who do not conform to the expected conditions. It also doesn’t provide ways of understanding human agency which is so important within the deeper history social welfare – the creation of social movements, the field of community organizing, the acts of citizen leaders fighting social injustice. However, some social welfare scholars are beginning to discuss how both perspectives – which both recognize the importance of larger social structures and allows for the power of human agency – can be reconciled at the multiple levels of social work practice, leading to new awareness and understanding (Cooney forthcoming; Emirbaye and Williams 2005; Kondrat 1999; Mullaly 2007; Sandfort 2003).

To illustrate how this theory informs our understanding the technology of human service organizations, let’s turn to more in-depth consideration of the welfare-to-work and early childhood education agencies described earlier.<sup>2</sup> In the welfare-to-work cases, Figure 1 illustrates Work First program embodied in public policy: clients are referred from public welfare agencies, oriented by the human service organization, and placed into “job search support.” If they are not successful in securing employment, they move to “job readiness” activities until employment is secured. Field research, however, revealed significant variation in how this policy idea was carried out. For the initial ‘job search support,’ organizations developed programming that aligned with the structures of their social systems, rather than the ideals suggested by policy. One organization, Helping Hand, developed the fancy-titled ‘career academy,’ which actually involved merely directing clients to complete paperwork, do route assessments, and construct resumes, without any attention to assessing clients’ work readiness,

---

<sup>2</sup>More detailed analysis of the welfare-to-work cases can be found in Sandfort (2003).

ability or interests. To comply with policy requirements that clients do 20 hours of activity, they then assigned them to on-line job searching.

These activities were justified – in fact were understood to be the only reasonable option – because of the social structures within the organization. When asked in interviews, staff voiced significant doubts about the viability of Work First model, although they clearly believed that welfare recipients should find employment. In this county, the economy was strong. Clients' success seemed more dependent upon their inherent motivation than whether or not they attend the Work First program. As Theresa said, "...[T]here's no real point to go into the Work First program for a lot of people. If people who are on welfare are interested in getting a job,...they go and get a job....If they're not, then they don't want to come to a program that's going to have them 20 hours on the job." This belief, reinforced with each story of a client who found a job before attending the program orientation or each newspaper headline about the county's low unemployment shared in the lunchroom, had come to be a rule of this social system. Although there were considerable resources available – computers, telephone banks, access to county services – staff did not mobilize them to help welfare clients get jobs.

Enacted program technology is similarly shaped by the social structures at the other two organizations, Eastside and Enhance Corporation, albeit to different ends. At Eastside, "job search" workshops typically involved clients signing in, sitting down to find three potential employers in the phone book or newspaper, and, then, asking the classroom supervisor to sign off on the list, so the client could leave. On random days, clients might be asked to complete mock applications, listen to lectures about personal hygiene, or report back to the group about the employers they had contacted. Clients flowed in and out through the door during the entire morning, most spending little more than 20 minutes at Eastside. These activities were a direct

outcome of the social system. Eastside was a community college and the staff strongly believed in the benefits of formal education. They perceived Work First as, in the words of one staff member, "...a temporary fix to a long term problem." As a result, staff believed they must provide a haven for clients, a place where people care about what happens to them. In contrast to other Work First sites, there were few concrete resources at Eastside to support job search activities – no computers for enhancing clients' skills, no telephones for making calls to potential employers, no materials to enhance job search training. These limited resources and the rules that clients need merely support served to justify the lack of substantive job search assistance. The shared rules and resources legitimate the limited technology that Eastside developed to move welfare recipients into employment. Yet, this limited technology, itself, also had structuring properties. Because contact with clients occurs only a few hours a week, other tasks, such as paperwork, expanded to fill the time.

In the same county, Enhance Corporate developed a very different service technology for moving welfare recipients into the workforce. In the first week, participants attended a structured "classroom training," where instructors strove to develop relationships and build trust with each individual client through skits, testimonies, and stories. On the final day of classroom training, staff met individually with all participants to identify sectors for targeted job search and conduct mock interviews. Throughout the agency, from management to support staff, there was a deeply held belief that to become self-sufficient, clients just need to start with one job, any job. This rule is explained by Clarice: "...[E]veryone is employable.... The only thing you have to do is stop and think, 'What type of employers hire high school students?' .... It might be some of the lower skilled places -- McDonald's, Burger King-- but it's at least getting their feet in the door." In this organization, staff developed and utilized tools, such as extensive employer lists and files

of applications, that are important resources that helped them find employment for clients. The rules and resources supported a service technology primarily focused on engaging clients in the program and building their desire to find employment and leave welfare far behind. The interactive methods of classroom trainers, the individual assessments and mock interviews were all logical and legitimate action in this social system. As in other sites, the adopted technology of Enhance Corporation also structured the nature of staffs' day to day tasks. Staff met weekly in teams to discuss the progress of each individual participant in the program and strategized about how to find appropriate employment for that person.

Although these three welfare-to-work organizations all operate a similar program model, respond to the same policy mandates, receive comparable levels of funding, and are assessed by the same outcomes, they have developed unique core technologies for delivering this program. As structuration theory suggests, these technologies are structured by the shared rules and purposively deployment of resources within these context. A similar analysis can help us understand the variation in “people changing” technology within three early childhood education settings. As Figure Three illustrates, the components of this technology are more complex. These local organizations combined three sources of public funding – child care subsidies, Head Start, and state preschool dollars – to provide full-day care for low-income children and their parents. Federal Head Start rules mandate that some services, such as health and parental support, be available. Yet, each organization configured these services differently, with important variation existing between sites in terms of access and service intensity.

One significant difference was the process of initial assessment which had significant consequences on the entire technology used in these organizations. All three sites did rolling enrollment into the child care centers. Yet, staff assessment of parental condition was very

significant because each public funding source has distinct eligibility criteria. At Salute, staff asked a standard set of questions and, if parents meet the income-eligibility criteria, their children can enroll in one of two Head Start/Day Care classrooms. At that site, a four-year-old, would be pulled out of that classroom and go to a ‘preschool’ enrichment classroom for half-day programming. This process was supported by the structures of the local social system. At this site, programming was delivered through a partnership between the center and local school district. Although, staff from both organizations delivered the programming, they were quite convinced of pedagogical differences between the Head start/Day care classroom and ‘preschool’ enrichment classroom. Staff drew upon different resources – such as distinct standardized child assessment tools and access to support services – to carry out their program elements. Such rules and resources created structures and assured that staff did not meet together to comprehensively serve 4-year-old children and their parents. Instead, children were exposed to duplicate, rather than comprehensive, services.

Intake assessment had different implications for program technology enacted at the Opportunity Child Care Center. As Figure Three illustrates, considerable referrals for early childhood education in this organization came from the other human service programs operated by the agency. Although referral happen throughout the year, intake timing had significant implications for service delivery in this site. If a 4-year-old’s name was received before May and their parents met the income requirements, the child was placed in the organization’s full-day Head Start room, where they could access an array of services. If a referral was received at a different time of the year, or any of these other criteria are not met, children were placed in the day care room. Even though this process caused systematic under-enrollment in the Head Start room, staff did not challenge this structure. In their minds, there were strict eligibility criteria for

the public programs that mapped directly to a particular set of services; Head Start resources could not be shared with other center children.

This understanding – and the result it had upon service technology – was dramatically different at the Volunteering center. In this organization, early childhood staff were supported in their intake processes by an important organization-wide resource: a management information system that allowed for easy computerized identification and tracking of clients. This resource, and the shared belief that the public funding streams could support a full array of programming, yielded a program structure where many children accessed an array of services to support their growth and development. In spite of differences in eligibility, Volunteering did not create separate classrooms where certain children were segregated because of their funding eligibility. Instead, three classrooms existed which used the same curriculum. All children also accessed on-site health services and family workers provided additional support to very low-income families. Staff felt it was their responsibility to fill out the required paperwork associated with public funds and navigate conflicting rules rather than allowing them to be a barrier for parents. The organizational resources and shared staff beliefs created a structure that provided a seamless offering of services to children. This structure, in turn, helped to assure that more children accessed enrichment and support to help them become ready for kindergarten.

In all of these cases, the technology enacted by these human service organizations – be they people processing technologies like the welfare-to-work agencies or people changing technologies like early childhood education – emerged from the unique ways policy mandates interacted with organizational resources and shared staff beliefs about clients and service quality. In all cases, front-line managers and staff developed and utilized the rules and resources in their social systems to structure their actions and enact programming. Although structuration theory

suggests that such social processes are significant in many settings, the implications of this process might be particularly significant for human service organizations. As one senior manager from the early childhood organization, Salute, explained:

...The majority of people really do want to provide good, high-quality services. Yet, many [agencies], ...particularly those that provide services to low-income children and families, have had to depend upon ... subsidies which were far below market rate. Many of them didn't have the resources they needed to be able to do it. It wasn't lack of knowledge. It was lack of resources. One of the reasons we have so many different models is, to quote Malcom X, 'by any means necessary.'"

In resource-starved human service organizations, staff beliefs about what they can – and can't – accomplish takes on greater significance in determining the actual shape of program delivery. As others have noted, program delivery is a moral task which involves the exertion of power (Hasenfeld 1992). The rules of the social system often emerge from practice-based knowledge gleaned from years of experience, experience that is then shared with less experienced colleagues and recognized as legitimate way to get things done (Yanow 2004). As they strive to reconcile the perceived requirements of external resources with their own shared beliefs and the reality of limited infrastructure, staff and managers are left to create programs "by any means necessary." In welfare-to-work, staff develop attendance forms, assemble job applications, and order training videos. In early childhood, staff use established curriculum, identify standardized child assessment, and create family plans. Yet, once established, these tools of service technology assumes larger proportions. They actually create structures that direct staff actions, reinforce their beliefs, and shape their interpretations of events.

These findings do not contradict the conclusion by other scholars that human service technology is ambiguous. The program as enacted by these six organizations varied considerably. Yet, in spite of the uncertainty and ambiguity, structuration theory offers us a way

to understand this variation as an outcome of a social process. It also helps us to see that this social process has real consequences in determining what intervention is enacted by the organization. It actually allows street level workers to carry out their day-to-day tasks. In fact, it creates a structure that transcends the feelings of individuals; in light of personal ambivalence, staff evoke the structure of the program and use it to justify actions they struggle to reconcile. The social structure defines what is rational and socially acceptable within the organization. Yet, there is a clear paradox: while these structures shape staff action and understanding, they also are subjectively developed out of the particular social system. The structures do not organically translate to another organizational context.

Giddens's theory, as well as other practice-based social theories, suggests a new way to conceptualize human service organizational technology. Rather than assessing enacted technology in relation to its faithful replication of discrete model programs, these theories push us to see organizational technology as translation. Staff and managers use their shared knowledge and beliefs, combine them with the available resources – some from policy mandates, others from organizational conditions, and still other they develop – and translate them into a series of activities designed to work with their clients. As a result, to study human service technology, we must more closely attend to the social processes within organizations. Only through that inquiry will we gain insight into how the variation of technology – under similar environmental circumstances – is created and maintained.

### **Using Concepts from Structuration to Improve Enacted Program Technology**

The theory also suggests important avenues for practice. The process diagrams discussed earlier illustrate the steps and sequences involved in program delivery, as well as the intensity and duration of services. On face, they are a simple representation of practice. However,

structuration theory points to a deeper understanding. As the examples of the welfare-to-work and early childhood programs illustrate, social structures can hinder staff's abilities to actually learn from their experience and make changes. Welfare-to-work staff might embrace paperwork rather than question the fundamental premise of their program. Early childhood staff's beliefs in policy requirements might cause them to under-enroll their enhanced program rather than achieving the real intent of policy. Structures can provide a default way of interpreting events or directing people towards a narrow range of acceptable responses (Bresnen, Goussevskaia, and Swan 2004). People chose to maintain the existing patterns because these routines and understandings work well-enough to accomplish the task at hand.

Yet, in Giddens' conception, changes happen within social systems because people inherently possess agency. While change can happen unintentionally, it also can be introduced as individuals bring new ideas and tools, acting as key resources, into the setting. With such an awareness, managers can use tools, such as process diagrams, as mechanisms for changing social systems (Feldman et al. 2006; Latour 2005). Reconceptualized as a resource, managers can use these visual representations to inspire conversations, assessment, and program refinement. They can make the steps in program technology more tangible, more objective, more able to inspire focused discussions about program processes and how they contribute to desired outcomes.

Through facilitating conversations about such representations, managers can help a group of people establish new program processes or refine established ones. They can also introduce new rules or schemas of understanding. On one level, the diagrams provide a mechanism for all to see inefficiencies, account for backlogs in various parts of the process, and anticipate staffing shifts. This naturally leads to questions about the established processes – is it really effective to merely have welfare clients sign-in and look for 10 minutes in the newspaper rather than

providing more substantive assistance in networking and job search? Is it really efficient to restrict the admission of 4-year-olds into enhanced early childhood programs only once per year when the classroom can accommodate more needy students? On the other level, by facilitating a process of examination and reflection, managers also can create new beliefs within the social system. The diagrams elicit staff reflection about program elements and consideration of ways to refine and improve program elements. Such a process signals that organizational learning and continuous improvement are important. It conveys expectations of program delivery and performance and highlights notions of mutual accountability. It interacts more formal work process analysis with social system refinement in order to design new technologies through a socio-technical model (Nadler & Gerstein, 1992; Daft 2006). Structuration theory suggests that – by realizing their agency, drawing upon tools, and suggesting new understandings – managers can improve enacted program technology within human service organizations.

Thus, rather than ignoring the social process within human service organizations, structuration theory spot-lights it. Front-line human service staff are going to have understandings about program that emerge from their practice experience. Rather than discrediting this source of knowledge, structuration theory recognizes its validity and its power in determining action. Yet, structuration theory also points to an important role for managers. Rather than just an amalgamation of staff beliefs and misimpressions, enacted program technology must be plausibly tied to achieving desired social outcomes. By purposively selecting resources and offering alternative understandings of incidents, managers can be critical actors in making this change, in building program capacity that is an important component of overall organizational effectiveness (Kaplan 2001; Letts, Ryan, and Grossman 1999; Sowa, Selden, and Sandfort 2004).

## **Concluding Thoughts**

In the work of human service organizations, technology is rarely limited to objective factors but is intrinsically linked to the social process of transforming clients, as “raw materials,” into desired outcomes. Devolution of programmatic authority, limited scientific knowledge of program efficacy, and unavoidable discretion of front-line workers creates unavoidable variation in human service organizational technology. As we have seen, even when they are charged with carrying out the same welfare-to-work or early childhood public policy, this variation can be quite significant. Certain theoretical schools, such as new institutionalism, are helpful in suggesting that macro- and environmental factors that are significant in shaping technology. However, other theoretical perspectives, such as the ones emphasized here, focus on how program technologies are developed and reproduced each day. Structuration theory highlights how staff simultaneously create, sustain and operate within the particular parameters of their organizational context. Although they know little about the efficacy of service approaches and must work with unpredictable clients, staff still find ways of focusing their attention on particular tasks. They are not passive dupes that blindly respond to institutional or environmental forces. Yet, neither are they completely autonomous actors. Instead, structuration theory places both human agency and the structural constraints that bear upon it at the center of its analysis. It helps us to see that, as Roberts and Grabowski write, “...technology and structure are both a process and a product of human action and interaction.” (1999, pg. 168).

Structuration theory also provides a new way to think about management interventions. Tools, such as process diagrams, can be helpful for improving program delivery. For one, they help make visible and communicate the key program elements. Oftentimes, this can be helpful to increase staff awareness. It also can be used to communicate with others outside the

organization who directly have a stake in program delivery. Such diagrams can be used in program orientations to help clients or with funders to help describe current processes and key points of intervention. The tool, though, also can be an important mechanism within the organization to facilitate deeper conversations about effectiveness and program improvement. In this way, it can become an resource for managers wanting to bolster programmatic capacity. In their attempts to improve human service organizations as potent institutions for changing people's lives, managers must recognize their own roles in attending to current process and improving operations. Although there will always be environmental pressures to respond to, managers can play critical roles in honing program delivery processes, so that they can reflect the best in professional judgment and group deliberation rather than unexamined beliefs and routines.

Social welfare can benefit significantly from engaging with the new, emerging theories that grapple with the significance of social process and context. These theories are powerful. They emphasize that program effectiveness is not an ideal to be discovered and instituted but rather an outcome of a process of experimentation, reflection and refinement. These theories both offer ways for scholars to improve research about the "black box" of human service organization and frameworks for managers to better understand their own roles bolstering programmatic capacity. Attending to both is essential to do the important work of helping human service organizations make more positive changes in their client's lives.

## References

- Adler, P. S. and B. Borys. 1996. "Two types of bureaucracy: Enabling and coercive." *Administrative Science Quarterly* 41(1):61-89.
- Barley, Stephen. 1986. "Technology as an Occasion for Structuring: Evidence from Observations of CT Scanners and the Social Order of Radiology Departments." *Administrative Science Quarterly* 31(1):78-108.
- Barley, Stephen. 1990. "The Alignment of Technology and Structure Through Roles and Networks." *Administrative Science Quarterly* 35: 65-103.
- Barley, Stephen. and Pamela S. Tolbert. 1997. "Institutionalization and Structuration: Studying the Links between Action and Institution." *Organization Studies* 18(1):93-117.
- Barzelay, Michael. 2002. "Origins of the New Public Management: An international view from public administration/political science." Pp. pp 15-33 in *New Public Management: Current Trends and Future Prospects*, edited by K. McLaughlin, S.P. Osborne and E. Ferlie. New York: Routledge.
- Blakely, C. H. e. a. 1987. "The Fidelity-Adaptation Debate: Implications for the Implementation of Public Sector Social Programs." *Administrative Science Quarterly* 32(3):253-268.
- Borden, William. 1992. "Comments on 'Theories of Kernberg and Kohut: Issues of Scientific Validation'." *Social Service Review* 66(3):467-70.
- Bourdieu, Pierre. 1990. *The Logic of Practice*. California, Stanford University Press,.
- Bresnen, Mike, Anna Goussevskaia and Jacky Swan. 2004. "Embedding New Management Knowledge in Project- Based Organizations." *Organization Studies* (01708406) 25:1535-1555.
- Brown, Amy. 1997. *Work First: How to Implement an Employment-Focused Approach to Welfare Reform*. New York: Manpower Development Research Corporation.
- Bryson, John M., Fran Ackermann, Colin Eden and Charles B. Finn. 2004. *Visible Thinking*. Hoboken, NJ: John Wiley and Sons.
- Cooney, Kate. forthcoming. "Fields, Organizations & Agency: Towards a Multi-level Theory of Institutionalization in Action." *Administration & Society*.
- Daft, Richard. 2006. *Organizational Theory and Design*, 9<sup>th</sup> edition. South-Western College Publisher.

- DiMaggio, Paul and W. Powell. 1991. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *The New Institutionalism in Organizational Analysis*. W. Powell and P. DiMaggio. Chicago, University of Chicago Press.
- Duffy, Mary G. and Maria O'Meara. 2002. "Manage Mentor on Project Management: A Practice Guide to Managing Tasks and People."
- Emirbayer, Mustafa and Eva M. Williams. 2005. "Bourdieu and Social Work." *Social Service Review* 79(4):689-724.
- Feldman, Martha S., Anne M. Khademian, Helen Ingram and Anne S. Schneider. 2006. "Ways of Knowing and Inclusive Management Practices." *Public Administration Review* 66:89-99.
- Fligstein, Neil. 2001. "Social Skill and the Theory of Fields." *Sociological Theory* 19(2):105-125.
- Fry, L. W. 1982. "Technology structure research: Three critical issues." *Academy of Management Journal* 25:532-552.
- Garfinkel, Harold. 1967. *Studies in Ethnomethodology*. Oxford, UK: Blackwell Publishing Limited.
- Giddens, Anthony. 1984. *The Constitution of Society: Outline of a Theory of Structuration*. Berkeley, California, University of California Press.
- Giddens, Anthony. 1990. *Consequences of Modernity*. Stanford University: Stanford University Press.
- Giddens, Anthony. 1993. *The Giddens Reader*. Stanford, California, Stanford University Press.
- Glisson, Charles. 1978. "Dependence of Technological Routinization on Structural Variables in Human Service Organizations." *Administrative Science Quarterly* 23: 383-395.
- Glisson, Charles. 1992. "Structure and Technology in Human Service Organizations." *Human Services as Complex Organizations*. Y. Hasenfeld. Newbury Park, Sage Publications.
- Goffman, Erwin. 1959. *Asylums*. New York, Doubleday.
- Goodman, P. S. and L. S. Sproull. 1990. *Technology and Organizations*. San Francisco, Jossey-Bass.
- Gronbjerg, Kirsten. 1993. "Understanding Nonprofit Funding: Managing revenue in social service and community development organizations."
- Hage, J. and M. Aiken. 1974. *Routine Technology, Social Structure, and Organizational Goals. Human Service Organizations: A Book of Readings*. Y. Hasenfeld and R. English. Ann Arbor, University of Michigan Press.

- Handler, Joel. 1992. *Dependency and Discretion. Human Services as Complex Organizations*. Y. Hasenfeld. Newbury Park, Sage Publications.
- Hasenfeld, Yeheskel. 1972. "People Processing Organizations: An Exchange Approach." *American Sociological Review* 37(June): 256-263.
- Hasenfeld, Yeheskel and R. English (1974). "Organizational Technology," *Human Service Organizations: A Book of Readings*. Ann Arbor, University of Michigan Press.
- Hasenfeld, Yeheskel. 1978. *Client-Organizations Relations: A Systems Perspective. The Management of Human Services*. R. Sari and Y. Hasenfeld. New York, Columbia University Press.
- Hasenfeld, Yeheskel. 1983. *Human Service Organizations*. Englewood Cliffs, New Jersey, Prentice Hall.
- Hasenfeld, Yeheskel, ed. 1992. *Human Services as Complex Organizations*. Newbury Park, Sage Publications.
- Haugen, Leslie K. 2006. "The case for complexity: A look at the relationship between individual and structure from the inside out." *Human Resource Development International* 9:49-67.
- Hickson, David J., D. S. Pugh and Diana C. Pheysey. 1969. "Operations Technology and Organization Structure: An Empirical Reappraisal." *Administrative Science Quarterly* 14(3):378.
- Hulin, Charles L. and Mary Roznowski. 1985. "Organizational Technologies: Effects on Organizations' Characteristics and Individuals' Responses." *Research in Organizational Behavior* 7:39.
- Jaskyte, Kristina and William W. Dressler. 2005. "Organizational Culture and Innovation in Nonprofit Human Service Organizations." *Administration in Social Work* 29(2):23-41.
- Jones, Oswald, Tim Edwards and Martin Beckinsale. 2000. "Technology Management in a Mature Firm: Structuration Theory and the Innovation Process." *Technology Analysis & Strategic Management* 12:161-177.
- Joseph, George. 2006. "Understanding developments in the management information value chain from a structuration theory framework." *International Journal of Accounting Information Systems* 7:319-341.
- Kaplan, Robert S. 2001. "Strategic performance measurement and management in nonprofit organizations." *Nonprofit Management and Leadership* 11(3):353-370.
- Keegan, Orla, John Coopey and Nick Emler. 1998. "Managers' innovations and the structuration of organizations." *Journal of Management Studies* 35:264.

- Kondrat, Mary E. 1999. "Who Is the "Self" in Self-Aware: Professional Self-Awareness from a Critical Theory Perspective." *Social Service Review* 73(4):451-475.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.
- Lawrence, Paul R. and Jay W. Lorsch. 1986. *Organization and Environment: Managing Differentiation and Integration*. 2nd ed. Boston, MA: Harvard Business School Press.
- Letts, Christine. , William Ryan and Amy Grossman. 1999. *High Performance Nonprofit Organizations*. New York: John Wiley & Sons, Inc.
- Lipsky, Michael. 1980. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. New York, Russell Sage Foundation.
- McGrew, J., G. Bond, L. Dietzen and M. Salyers. 1994. "Measuring the Fidelity of Implementation of a Mental Health Program Model." *Journal of Consulting and Clinical Psychology* 62(41195):670-678.
- Meyer, J. and B. Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2):340-363.
- Meyers, Marcia, B. Glaser, et al. 1998. "On the Front Lines of Welfare Delivery: Are Workers Implementing Policy Reforms?" *Journal of Policy Analysis and Management* 17(1).
- Meyerson, Debra. 1991. "Normal Ambiguity? A Glimpse of an Occupational Culture." *Reframing Organizational Culture*. P. J. Frost. Newbury Park, Sage.
- Mohr, Lawrence B. 1971. "Organizational Technology and Organizational Structure." *Administrative Science Quarterly* 16:444.
- Moynihan, Donald P. 2006. "Managing for Results in State Government: Evaluating a Decade of Reform." *Public Administration Review* 66:77-89.
- Mullaly, Bob. 2007. *The New Structural Social Work*. 3rd ed. Ontario: Oxford University Press.
- Nadler, David. and Marc S. Gernstein. 1992. "Designing High-Performance Work Systems: Organizing People, Work, Technology and Information." Pp. 110-132 in *Organizational Architecture: Designs for Changing Organizations*, edited by D. Nadler, M. Gerstein and R. Shaw. San Francisco: Jossey-Bass.
- Nuehring, Elaine M. 1978. "The Technological Character of Barriers to Primary Preventive Activity in Mental Health: A Framework for Analysis." *Administration in Social Work*, 1978, 2, 4, Winter 2(4):451-468.
- Orlikowski, Wanda J. 1992. "The Duality of Technology: Rethinking the Concept of Technology in Organizations." *Organization Science* 3(3986):399-427.

- Parsons, Talcott. 1956. "Suggestions for a Sociological Approach to the Theory of Organizations -I." *Administrative Science Quarterly* 1:63-85.
- Perrow, Charles. 1967. "A Framework for the Comparative Analysis of Organizations." *American Sociological Review* 32: 194-208.
- Pesso, Theresa. 1978. "Local Welfare Offices: Managing the Intake Process,." *Public Policy* 26(2): 305-330.
- Pozzebon, Marlei. 2004. "The Influence of a Structurationist View on Strategic Management Research." *Journal of Management Studies* 41:247-272.
- Prottas, Jeffry. 1979. *People Processing: The Street-Level Bureaucrat in Public Service Bureaucracies*. Lexington, MA, Lexington Books.
- Pugh, S., D. J. Hickson, C. R. Hinings and C. Turner. 1968. "Dimensions of Organization Structure." *Administrative Science Quarterly* 13(1):65.
- Ranson, S., B. Hinings, et al. 1980. "The Structuring of Organizational Structures." *Administrative Science Quarterly*: 1-17.
- Riley, Patricia. 1983. "A Structurationist Account of Political Culture." *Administrative Science Quarterly* 28(3):414.
- Rino, Patti. 1985. "In Search of Purpose for Social Welfare Administration." *Administration in Social Work, 1985, 9, 3, Fall* 9(3):1-14.
- Ritzer, G. 1992. *Contemporary Sociological Theory*. New York, McGraw-Hill.
- Roberts, K. H. and M. Grabowski. 1999. "Organizations, Technology and Structuring." *Managing Organizations: Current Issues*. S. R. Clegg, C. Hardy and W. Nord. London, Sage Publications.
- Rosengren, W. and M. Lefton. 1970. *Organizations and Clients: Essays in the Sociology of Service*. Columbus, Ohio, Charles Merrill Publishing.
- Rossi, Peter H. 1978. "Some Issues in the Evaluation of Human Service Delivery." *The Management of Human Service Organizaitons*. R. Sarri and Y. Hasenfeld. New York, Columbia University Press: 235-261.
- Roth, J. A. 1971. "Some Contingencies of the Moral Evaluation and Control of Clientele: The Case od the Hospital Emergency Service." *American Journal of Sociology* 77(1): 839-856.
- Sandfort, Jodi 1997. "Peering Into the Black Box: A Study of the Front-Line Organizations Implementing Welfare Policy in Michigan." University of Michigan Editor, Ann Arbor, Michigan.

- Sandfort, Jodi, Ariel Kalil and Julie Gottschalk. 1999. "The Mirror has Two Faces: Welfare Clients and Front-line Workers View Policy Reform." *Journal of Poverty* 3(3).
- Sandfort, Jodi R. 2000. "Examining the Effect of Welfare-to-Work Structures and Services on a Desired Policy Outcome." in *Governance and Performance: New Perspectives*, edited by C.J. Heinrich and L.E. Lynn Jr. Washington, D.C.: Georgetown University Press.
- Sandfort, Jodi R. 2003. "Exploring the Structuration of Technology within Human Service Organizations." *Administration & Society* 34(6):605-631.
- Sarason, Yolanda. 1995. "A Model of Organizational Transformation: the Incorporation of Organizational Identity into a Structuration Theory Framework." *Academy of Management Proceedings*:47-51.
- Savage, Andrea. 1987. "Maximizing Effectiveness through Technological Complexity." *Administration in Social Work* 11(3-4):127-143.
- Schein, Edgar H. 1990. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass.
- Schneider, Ann and Helen Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87(2934):334-347.
- Scott, Richard. 1981. *Organizations: Rational, Natural, and Open Systems*. Englewood Cliffs, NJ, Prentice Hall, Inc.
- Seefeldt, Kristin, Jodi R. Sandfort, et al. 1998. *Moving Towards a Vision of Family Independence: Local Manager's Views of Michigan's Welfare Reforms*. Ann Arbor, Michigan Program on Poverty and Social Welfare Policy, University of Michigan.
- Selden, Sally C. and Jessica Sowa. 2004. "Testing a Multi-Dimensional Model of Organizational Performance: Prospects and Problems." *Journal of Public Administration, Research and Theory* 14(3):395-416.
- Sewell, W. 1992. "A Theory of Structure: Duality, Agency, and Transformation." *American Journal of Sociology* 98(1): 1-29.
- Shrader, Charles B., James R. Lincoln and Alan N. Hoffman. 1989. "The Network Structures of Organizations: Effects of Task Contingencies and Distributional Form." *Human Relations* 42:43.
- Smith, Brenda D. and Stella E. F. Donovan. 2003. "Child Welfare Practice in Organizational and Institutional Context." *Social Service Review* 77(4):541-563.
- Smith, Steven R. 2005. "Managing the Challenges of Government Contracts." Pp. 371-390 in *The Jossey-Bass Handbook of Nonprofit Leadership and Management*, edited by R. Herman and Associates. San Francisco: Jossey-Bass.

- Soss, Joe, Sanford F. Schram, T. P. Vartanian and E. O'Brien. 2001. "Setting the terms of relief: Explaining state policy choices in the devolution revolution." *American Journal of Political Science* 45(2):378-395.
- Sowa, Jessica, Sally Selden and Jodi Sandfort. 2004. "No Longer 'Unmeasurable?': A Multi-dimensional Integrated Model of Nonprofit Organizational Effectiveness." *Nonprofit and Voluntary Sector Quarterly* 33(4):711-728.
- Stones, Rob. 1991. "Strategic Context Analysis: a New Research Strategy for Structuration Theory." *Sociology* 25:673-695.
- Vallaster, Christine and Leslie de Chernatony. 2006. "Internal brand building and structuration: the role of leadership." *European Journal of Marketing* 40(7):761-784.
- Vinter, Robert. 1963. "Analysis of Treatment Organizations." *Social Work* July: 3-15.
- Vinzant, Janet C. and L. Crothers. 1998. *Street-Level Leadership: Discretion and Legitimacy in Front-line Public Service*. Washington, DC: Georgetown University Press.
- Waddell, Dianne. 2005. "Program Management: The Next Step in the Evolution of Project Management?" *Problems & Perspectives in Management*(3):160-168.
- Weaver, Dale. 1999. "Organizational Technology as Institutionalized Ideology: Case Management Practices in Welfare-to-Work Programs." *Administration in Social Work*.
- Weick, Karl. 1990. "Technology as Equivoque: Sense-making in New Technologies." *Technology and Organizations*. P. S. Goodman and L. S. Sproull. San Francisco, Jossey-Bass.
- Whittington, Richard. 1992. "Putting Giddens into Action." *Journal of Management Studies* 29(6):693.
- Willis, Paul. 1977. *Learning to Labor: How Working Class Kids Get Working Class Jobs*. New York, Columbia University Press.
- Yanow, Dvora. 2004. "Translating Local Knowledge at Organizational Peripheries." *British Journal of Management* 15:9-25.
- Zucker, Lynn. 1987. "Institutional Theories of Organization." *Annual Review of Sociology* 13(443-464): 443-464.
- Zucker, Lynn. 1977. "The Role of Institutionalization in Cultural Persistence." *American Sociological Review* 42(5): 726-43.

Figure 1: Welfare-to-Work and Early Childhood Program Technology as Envisioned by Public Policy

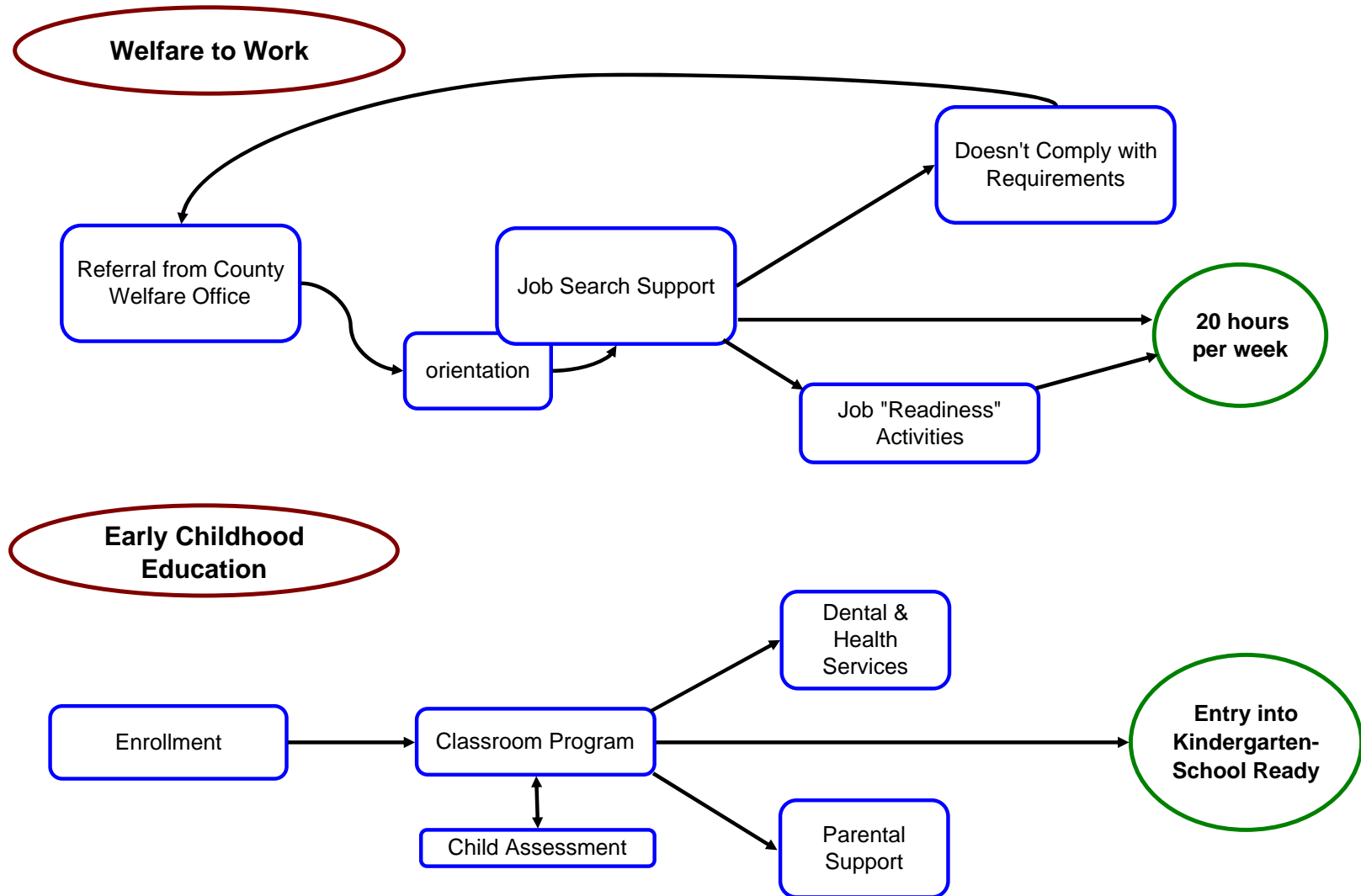
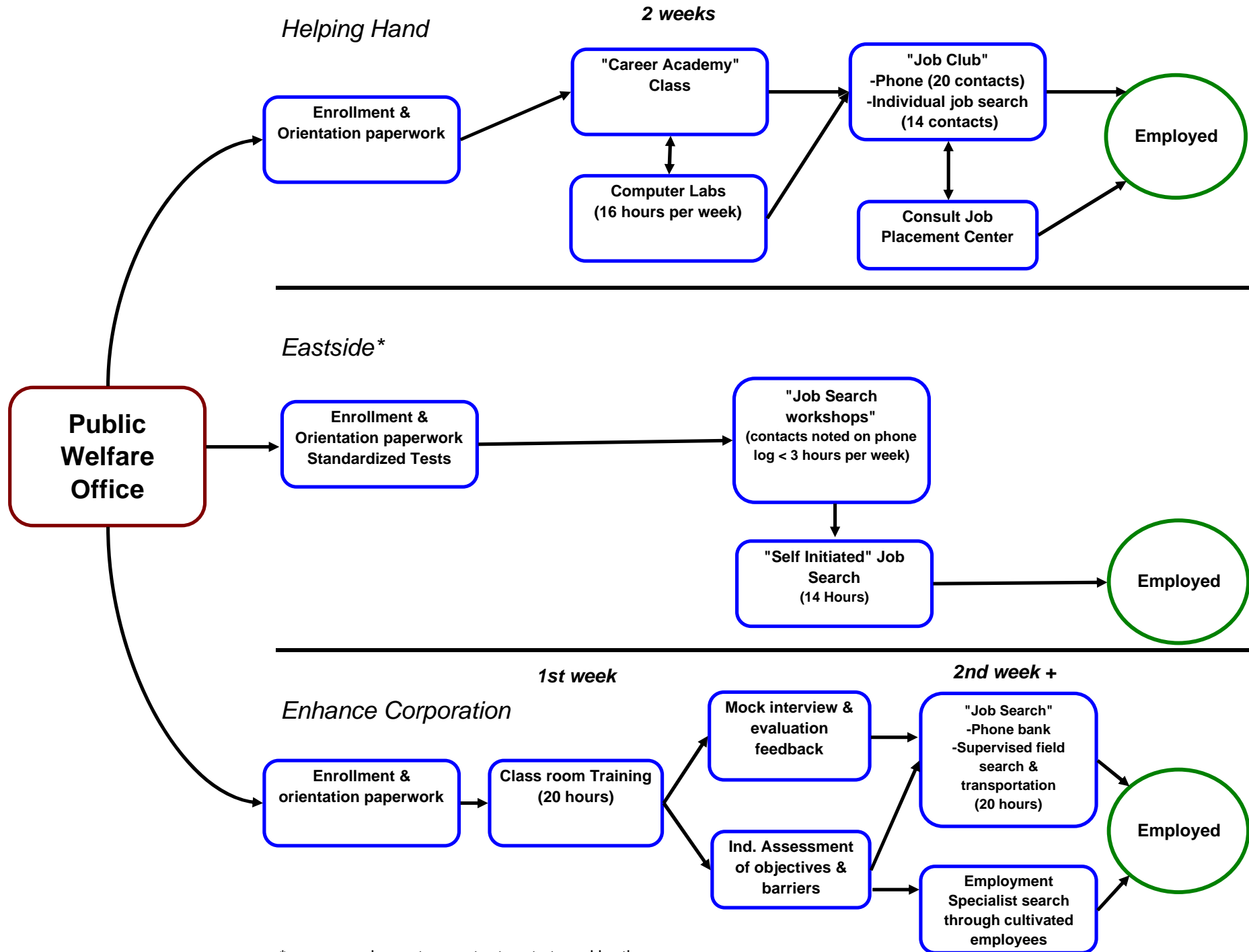


Figure 2: Enacted Program Technology in Three Welfare-to-Work Organizations



\* program elements constant, not staged by time

Figure 3: Enacted Program Technology in Three Early Childhood Education Organizations

