Coordination: A Conceptual Model and Practical Consideration.

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A reasonably precise and measurable definition of coordination is that coordination is the exchange of needed resources between two organizations: The Early Childhood Development Division in Texas evaluated how and why coordination begins and is maintained over time in groups of two organizations and in networks of many organizations. In studying the pairs of organizations it was found that four factors needed to exist before organizations would exchange resources: awareness, resource dependence, domain consensus, and problem commitment of goal similarity. Among the major findings of the study were that coordination occurs primarily as a rational response to a need for resources necessary to achieve certain organizational goals; that organizations that have something in common are more likely to coordinate than are those with nothing in common; that successful relationships are likely to emerge incrementally and to grow with small, successful encounters; and that the effectiveness of coordination can be measured by the amount of resources available as a result of coordination, by the attitudes of the partners, by reduction in competition between agencies, and through formalization of communication. An eight-step planning process for improving interagency coordination is included. (Author/IRT)
COORDINATION:
A Conceptual Model and Practical Consideration

A Speech Delivered to the Education Commission of the States' National Seminar on State Capacity Building

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I have been asked by the Education Commission of the States to discuss the topics of coordination. Frankly, I am a little overwhelmed being asked to talk about "coordination" to a group such as this one; a group made up of people who have been in the business of coordination for many years. And, too, the subject matter doesn't lend itself to an easy discussion either.

I guess the first question that comes to mind when talking about coordination is "What is coordination?" What does the concept mean? I'm sure you would agree that part of the problem is that although everybody uses the term, nobody can agree as to what it means. Even the literature on the subject varies significantly. I have heard coordination defined as 1) planning together; as 2) cooperation with another; 3) to some it means central authority exercising control over others to get concerted action, 4) to those more skeptical, coordination has come to mean just another layer of government and just one more interagency committee or council. One of the first people with whom I discussed the meaning of coordination told me that it had been his experience that anyone who said that he was coordinating with someone else was either a fool or a liar.

I'm sure that if you haven't debated the definition of coordination, then you have undoubtedly seen examples of what
coordination is and what it isn't. And there seem to be more illustrations of the latter. Let me list some of the more common ones:

- We have all heard or seen a situation where two programs coexist on the same street in the same town, serving the same clientele but totally unaware of the other.
- We found in a study of child care services in Texas that caseworkers from 7 different agencies were visiting the same family on one given day.
- We have all seen federal and state legislation that charges several different agencies with the responsibility for coordinating one another in the same program area.
- And we have all experienced first hand the proliferation of "Coordinator" positions in government at all levels -- and the proliferation of councils, committees and other "coordinative mechanisms."

But there are also notable examples of where coordination has been achieved:

- All of you assembled here today represent agencies that reflect successful interagency coordination.
- ECS itself is a classic example of how states and their corresponding educational agencies can coordinate on behalf of children.
- The 4-C concept that many of you have developed within your states illustrates some of the very best in
inter-agency coordination efforts.

O.K. So where does all this lead to? What does coordination mean? How can it be achieved? What are the most important factors that lead to effective coordination? Once coordination is begun, how do you maintain it and nourish it over time? These are the kinds of questions that people in our business must be concerned with and for which we must try and find some answers.

Before I tell you how we in Texas have approached these questions, let me take a few minutes to review for you what the literature on coordination says to us.

Most of the work done on coordination up until the last 10 years or so was focused on the federal government and federal programs. The earliest work emerged out of the trend among students of public administration that emphasized the strong executive form of management. Therefore, most of the written material talked about how the president or the chief executive could reorganize governmental agencies to improve control and productivity. The experiences of both world wars provided researchers and practitioners with a great deal of coordination experiences as it related to war mobilization efforts. The development of the executive budget and PPBS systems of planning and accounting dominated the coordination literature of the 50's and 60's. These are further examples of trying to achieve coordination by central authority and control.

But in the last decade, theorists have started looking
at organizational relationships where a central authority is not present and where organizations come together without the sanctions of a directing body. Most writers on coordination today agree that there are basically three types of coordination, even though their definitions differ. They are:

1) First, hierarchical or vertical coordination. This is the kind of coordination mentioned earlier where the participating organizations are placed within a hierarchical relationship and they are coerced into coordinating.

2) The second type is coordination by plan or what some call "managed" coordination. This is a middle ground approach between controlled and voluntary coordination. Coordination by plan describes the situation whereby organizations establish plans or written agreements by which they agree to engage in a particular level of cooperative interaction. I think we have all seen examples of this type of coordination when we have developed state or regional plans for delivering services to children. In such plans, most of the service-providing agencies are tied together into councils and committees and agencies agree to integrate their planning and service deliveries.

3) The third type of coordination is what the experts call unmanaged coordination or coordination by mutual adjustment. One author distinguished it from vertical coordination by calling it horizontal coordination. I like to call it very simply voluntary coordination.
For our purposes here, I am assuming that we are all most likely concerned with the third type of coordination: voluntary coordination. I think that most of us represent state offices of early childhood that share similar features and live under similar constraints when it comes to coordination.

Generally speaking, we:
1) have been charged with coordinating children's services,
2) have not been given the authority commensurate with that coordinative responsibility,
3) are new agencies in comparison with the service-providing agencies that we are supposed to coordinate;
4) so we have to tread lightly if we are to survive the first, formative years, and
5) we have to produce some results in a relative hurry if we are going to maintain the initial support that allowed for our creation.

For these and other reasons, organizations like the ones we represent are most often concerned with the voluntary coordination model. For the literature says that voluntary coordination most often occurs when hierarchical relationships do not exist and when newly emerging services enter the "system."

So, to conclude with what most of the experts say, we can see that coordination is a vague and imprecise term
that is used to explain how organizations behave towards one another. For in its broadest sense, coordination means a particular kind of interorganizational relationship that occurs for some reason, some purpose or some goal.

But I think we can go a couple of steps further toward developing a better definition of coordination. If we agree that coordination is a kind of organized effort, then it must develop in response to some type of influence. The two basic kinds of influence, as we have just seen, are central authority and mutual accommodation. If mutual accommodation or voluntary coordination is our focus, then we must ask ourselves why would groups or organizations willingly harmonize their activities.

In our study in Texas, we have hypothesized that the reason is: organizations have some goals that they cannot accomplish independently. That is to say, they are dependent upon one another in order to succeed at a given objective. This rationale gives us our basic operational definition of coordination: it is defined as the exchange of needed resources between two organizations. Let me repeat that: Coordination is the exchange of needed resources between two or more organizations.

By resources we mean money, physical materials, client referrals, technical staff services and also the less tangible items such as information, power and prestige.

What we have, then, is a reasonably precise and, just as importantly, a measurable definition of coordination that says coordination occurs when two organizations exchange needed resources.
Now, before I continue with the features of coordination, I'd like to stop and consider with you why it is that a group like this should be here examining the issues of coordination. Let me suggest that there are four primary reasons that compel us to take time to understand coordination and how it works:

1. The first, and these aren't necessarily listed in order of importance, is the fact that we are all members of public agencies. As such, we must recognize that the organizations that we work for are budget-based institutions -- that is to say, they are wholly dependent upon what they receive through the budget allocation process. The acid test of a budget-based institution is the ability to obtain, maintain and expand its budget. Coordination with other agencies, if you accept the definition I have just given you, permits an organization to increase the amount of resources available to it above and beyond its formal budget. Thus, interorganizational coordination becomes an extremely important method for increasing the resources to a public organization in order that it can do its job.

Have you ever stopped to think how different this coordination situation is for those of us in the public sector, as compared to our colleagues in the private sector. Just compare the approaches that the two parts of society take toward coordination.
In the traditional economic model, competition is good because it results in maximizing efficiency and minimizing costs. But in the human services model, competition is bad because it results in less efficiency and greater costs. In business, duplication is good because it gives the consumer a choice, whereas in government work it is bad because it is wasteful and fragments service delivery. And finally, in the business world, coordination is called collusion and that is illegal, while we are encouraged to coordinate because it is in the public interest. I think that one of the lessons from this comparison is that we must be cautious about how much we can learn about coordination from the studies of organizational behavior that come out of the private sector experience.

2. A second reason for understanding coordination is that we are in the middle of a concept explosion that says everything must be thought of in terms of "systems." We have borrowed the idea of systems from biologists to help ourselves understand the complexities of life around us. Now, I personally agree that this system-approach is an important and useful way for conceptualizing human services delivery. But, I also think that it has had a significant impact on our view of the importance of coordination. As we increasingly recognize the interdependence of social conditions in the
world, I think that we have come to see coordination more and more as an appropriate way for drawing together the many and varied actors in the "system."

3. A third reason is that we are all in one way or another reacting to the categorical, grant-in-aid phenomenon of the last decade. Let me take a moment to explain to you why I think that this experience with the Great Society has important implications in our discussion of coordination. Before 1960, the typical federal assistance program did not involve an expressly stated national purpose. Federal programs, rather, were seen as a way of helping state and local governments accomplish their own objectives. For instance, policy-making remained with state and local governments; federal review was limited to a comparatively greater degree, even funds themselves were distributed among the states on a formula basis and the state, within broad statutory guidelines, determined the allocation among communities within the states.

But, with the coming of the Great Society, the federal grant was seen as a means of enabling the federal government to achieve its own objectives. The War on Poverty, Head Start, and Medicaid were federal programs, conceived by federal officials and administered by federal agencies. And, in order to implement these federal programs, each agency developed its own
strategies of community organization. OEO had its community action agencies, HUD had its city demonstration agencies under the model cities program, Commerce has its economic development districts and so on. In an attempt to try and coordinate this maze of organizations and programs, the government chose to rely on mechanisms of voluntary coordination rather than central direction. Everybody was made a coordinator for something, sometimes with overlapping responsibilities. This created the classic situation of who is coordinating the coordinators.

Herbert Kaufman, a noted student of public administration, says that the three values of "representativeness, politically neutral competence, and executive leadership" alternatively dominate public administration. The period of the 1960's reflects the dominance of "representativeness." Today, in context of New Federalism and with a greater reliance on state and local decision-making, and with concepts like "capacity building" filling the scene, we can perhaps see a return to the "executive leadership" value. After all, isn't Mr. Carter saying he is going to reorganize and streamline the federal bureaucracy? Maybe we will witness a change in coordination styles from one of voluntary coordination to hierarchical coordination. I wonder if it can be done; we will have to wait and see.
4. The fourth reason for us being interested in coordination is, I think, that we all assume in good faith that better coordination means less costs and greater benefits to the constituents that we serve. The only problem with this intuitive judgment is that little or nothing has been done to empirically prove or disprove that conclusion.

I hope what I have said so far has been useful to you and that it has you thinking about coordination in ways that may be new. I have tried to give you a working definition of coordination, maybe not only the definition. And I have tried to suggest some of the reasons why a conference like this one should be concerned with trying to understand coordination.

Let me take the remaining few minutes to share with you more about the model of coordination that we have developed and what key findings that we have come up with that might be of interest to you.

Three years ago, the Early Childhood Development Division sponsored 13 demonstration projects around the state. A primary purpose was to try and find out answers to several key questions about interorganizational coordination. We wanted to understand how and why coordination begins and is maintained over time. We decided to approach these questions at two levels, and in two phases: first to see how coordination emerges between two organizations (pair-wise study) and second, to see how coordination comes about between and among a network of many
organizations (network study).

Briefly, the methodology we used was as follows:

1. First, we reviewed the literature to find out what others have already said about coordination.
2. Second, we developed a conceptual model and spelled out our test assumptions. The one I'm about to detail for you.
3. Third, we developed a series of questionnaires that were sent twice a year, for three years, to both our demonstration projects and to the agencies with whom they were interacting on a regular basis.
4. We are just about finished with the process of tabulating the data and formulating our findings from the pair-wise study, and
5. We have just started the process of taking the same basic research approach to the network level.

In our second phase we will be looking at the features of interagency coordination that occur at the network level. Now, let me show you a visual representation of our model of coordination and let me quickly explain each of the major components. (See page 13.)
Theoretical Model of Coordination

**Prerequisite Factors**
1. Awareness
2. Resource Dependence
3. Domain Consensus
4. Problem Commitment or Goal Similarity

**Structure**
1. Formalization
2. Routinization

**Process**
1. Intensity
2. Variation
3. Frequency
4. Amount

**Impact**
1. Perceived effectiveness
2. "Hard" measure of effectiveness
The left hand box entitled "Prerequisite Factors" represents those conditions or factors that we suggest would need to exist before organizations would want to exchange resources.

1. **Awareness** means the extent to which agency representatives know about the services and goals of other agencies. We talk about awareness at two levels: At one level we mean knowledge about an agency's goals, resources, programs, etc. The other level is the degree of personal acquaintance between key staff in agencies.

2. **Resource Dependence** - This means the extent to which the agencies are dependent on resources from outside sources. Without a felt need for additional resources, it is unlikely that agency directors will seek to coordinate with others.

3. **Domain Consensus** - This is the extent to which agencies agree on the jurisdictional boundaries of one another. In other words, if agencies don't regard one another as pursuing legitimate goals and objectives, they are unlikely to trust one another and work together.

4. **Problem Commitment or Goal Similarity** - This means the extent to which the agencies are committed to the same kinds of problems or goals and the extent to which they have similar staff and provide similar services.
We start by saying that agencies would prefer to maintain their autonomy. Autonomy suggests that it is easier and neater for the agency to maintain contact with its environment, its funding sources, its clients, its special interest groups. But if these four conditions exist, then we assume that agencies will seek coordinative relationships with one another. And, if they are in a coordinative posture, then we suggest that two additional things will happen and will happen simultaneously.

First, an exchange of resources will begin to take place between the agencies. This is what we call the PROCESS of coordination. At the same time, a STRUCTURE for coordination will be developed in order to provide the administrative arrangements necessary for the exchange of resources to occur.

We further hypothesized that the STRUCTURE and the PROCESS would be interdependent. The important variables in predicting this interdependence were assumed to be as follows:

1. The more intense, the more varied the type of resources, and the greater the frequency and the amount of resources exchanged, then the more formal and the more routine would be the administrative structure.

2. The converse would be true, all other things equal.

We then suggest that if all of these prerequisite factors existed and if there were a balance between the type of process and the type of structure, then there would be a positive impact on the agencies involved in the coordinative relationship. That
is to say, the agencies would consider the relationship to be an effective one and that they would strive to maintain that relationship over time.

Our problem, as you can imagine, was finding reliable measures of effectiveness. We chose two: one was simply to ask the staff involved in the daily coordination activities to indicate how positively or negatively they felt about the relationship and how worthwhile they thought it was. Secondly, we obtained through special reporting procedures, fairly accurate estimates of how many additional dollars and cents had been mobilized as a direct consequence of the coordinative efforts. These estimates included dollars added directly to the projects through grants, etc., and the dollar-value of goods and services donated or shared with the projects. The one thing that we have not finished yet is how to answer the question of whether or not the coordination has had a measurable impact on the children and the families being served. We are in the process now of distributing a consumer survey to partially get at this issue.

What we are finding as a result of all this may seem to some of as fairly straightforward and obvious but if that is the case, then you can take considerable comfort in the fact that your intuition has been substantiated by objective, statistical data. Let me list for you our major findings:

1. **How does coordination occur?**

   Probably the most significant finding was that
coordination does not occur for its own sake. Rather, coordination occurs primarily as a rational response by an organization to a need for resources necessary to achieve certain goals. I am sure that finding is consistent with most of your personal experiences in which you've seen coordinating mechanisms set up where nothing at all happened. We found that resource dependence is the single most important factor in predicting whether coordination will take place. But all by itself, resource dependence is not a sufficient condition for coordination to emerge; awareness and consensus are required, too. The more that agencies are aware of one another, both in programmatic and personal terms, and coupled with that, the more they agree about who should be doing what, then the greater is the potential for coordination to occur. Our results showed that the need for resources and the presence of awareness and consensus explain 64% of interagency resource transactions.

2. With whom is coordination likely to be established? Our study also told us something about the kinds of organizations that are most likely to coordinate with each other. In cases where the organizations have nothing in common, they are unlikely to coordinate. If, on the other hand, they are almost
identical, they are likely either to co-exist in cut-throat competition or they may merge into a single organization. Thus the intermediate range of organizational similarity seems to be the most stable for interagency coordination.

We also found that agencies develop different patterns of coordinative relationships, depending on the reasons they have for coordinating. For example, we found that there were three predominant reasons for coordinating among a cluster of regional agencies: resource transactions, direct services, and planning and coordination. The agencies coordinating for purposes of resource transactions evidenced a high degree of dependence on outside resources, a high degree of formalized agreements and contracts, and a comparatively low level of personal awareness among staff.

Those coordinating for client referrals and direct agency services, showed moderate amounts of dependence, awareness, consensus and formalized agreements, but a high level of personal awareness and personal communication techniques.

The last group, which was concerned with planning and coordination reported the lowest on dependence and formalization of agreements, but highest on awareness and consensus and highest in the use of
group meetings as their mode of communication.

3. **How is coordination maintained and improved over time?**

We found, as you might suspect, coordination, effective coordination anyway, does not take place in one fell swoop. Successful relationships are more likely to emerge incrementally and to grow with small, successful previous encounters. By participating in small steps toward coordination, each partner is able to see its positive aspect and to accommodate its negative aspects. We also learned something about what communications techniques are most appropriate for specific purposes.

Face-to-face communications are the most important and valuable communication technique. It is particularly necessary during the initial stages of coordination.

Phone calls are the second most important communication factor on a continuing basis.

Committee meetings appear necessary once a relationship has been established.

Written reports and letters appear important for two reasons: to increase awareness among the parties and to formally coordinate resource flows.

Overall, we discovered that increases in the frequency and quality of communications of all types increases the potential for coordination to occur.
4. Finally, how do you know if coordination is successful?
How do you know when you have achieved some level of coordination? Remember, coordination is a process, but it is also a result. Well, using this model you can go back and check to see if there are changes in any of these factors.

In our study group we found that:

a. The coordinating partners felt that the relationships were worthwhile and deserving of continuation. They perceived subjectively that the coordination was effective.

b. In measurable terms, we saw that the coordinating agencies did in fact increase the amount of resources available to each of them.

c. We computed that for every one dollar spent in coordination, the agencies received on the average $35 in goods and services.

d. Communications between the agencies became more standardized and often more formalized.

3. And finally, we saw that the degree of competition between the agencies increased incrementally.

I hope that when you take all these findings into account, you can see that not only is it possible to define coordination but, more importantly, it is possible to study it and to and to examine the dynamics of the "beast."
And if we can identify how coordination works then we can attempt to influence its outcome. I have spent most of my time listing for you those elements of coordination that lend themselves to some degree of rational manipulation by human contrivance. Certainly, there are many, many factors that don't. But if you accept those limitations, then I believe that we can expect modest improvements in interagency coordination.

Our Texas study was designed to analyze coordination between any two agencies, what we call a dyadic relationship. I don't think that I have to restate how you might go about establishing that type of coordinative relationship back in your home states. But what if you are like we are in the Early Childhood Development Division in Texas and have the mandate to coordinate all services to young children? We certainly don't have the authority to formally direct our sister agencies to coordinate. What do you do then?

Because then you are in the situation of working to achieve coordination among a network of agencies. A network of agencies can be defined as the total pattern of interrelationships of a cluster of agencies. This gets a little bit more complicated. But I think that same basic dynamics of coordination study in a network setting as well as they do in a simpler pair-wise setting.

Keeping the coordination model in mind, let me suggest
an eight-step planning process for improving interagency coordination.

Step 1: The process begins with the consideration of certain key questions:

Why should coordination be attempted?
What specifically needs to be coordinated?
Who should be involved in the coordination effort?
What are the expected outcomes of the coordination?

Step 2: The next step is to review and analyze the existing coordinative arrangements between and among the agencies involved. The coordinator, whoever that might be, an individual or an agency with that responsibility, could do this in terms of the coordination factors we have been discussing.

For example, the coordinator could develop some measurement of the degree of resource dependence each agency experienced, some measurement of the level of awareness and consensus that the agencies had concerning one another, and some measurement of the degree to which they had similar goals and objectives.

Further analysis could be done by examining the elements of a coordinative structure and process that may exist. The different types of communications could be analyzed as could the level of
formalization and standardization of the interagency agreements and procedures.

Finally, the coordinator could evaluate how the various agencies perceived the value and effectiveness of their relationships and whether or not the amount of resources available to all of them has increased as a result of the coordination.

**Step 3:** Having developed a representative picture depicting the interrelationships and interdependencies of the major actors in the service-delivery system, the next step would be to identify the gaps or deficiencies that existed between and among the agencies.

**Step 4:** The fourth step would be to engage experts in interagency coordination for assistance in understanding the causes and implications of the problems already identified.

**Step 5:** A corollary step is to develop alternatives for corrective action in conjunction with the experts and the agencies themselves.

**Step 6:** The next step is to begin to develop practical strategies for intervening and improving the coordinative system. Such strategies might include: a) ways for increasing the mutual awareness between agencies, b) methods for improving interagency communications and c) techniques for identifying areas of interdependence. These strategies
would be geared at effecting short-range, tangible successes upon which broader and longer-term expectations could be built.

Step 7: The seventh step is to translate the resulting strategies into a manageable course of action that can be effected.

Step 8: The final step is to set up a mechanism and the machinery necessary to watch over the implementation of the proposed strategies within the system. A long-term role for the "coordinator" is to continue to be available to see that the coordinative relationships begun are maintained and improved over time.

Now this has been obviously an over-simplified description of how to use the coordination model and the ideas about coordination that we have been considering to get a handle on ways to improve coordination. But I hope that you can see that many of these ideas can be used for developing an analytical framework and analytical tools to be used for coordination.

So, let me in the way of conclusion, list for you some additional thoughts that I have had about coordination. Then I am sure that you may well have more ideas to add.

1. First, coordination is an organizational or agency activity just as much as it is day care, or health services or bookkeeping or whatever. And, as such, it must be planned for in the context of
of the agency's goals, and it must be allocated resources; that is, time, money and manpower. If one is serious about coordination, it cannot be done on a part-time, hit-or-miss basis.

2. Second, coordination is becoming, if it hasn't already become, a buzzword that is used in government circles somewhat carelessly and carries with it the implication that coordination is the panacea for all that is wrong in government today. I think that this is dangerous and unfortunate for those of us who are seriously trying to make it work.

3. Third, coordination is not a very glamorous word to the public nor to the legislature. I think that most people outside the bureaucracy understandably expect agencies to coordinate and work together. When we point out that many governmental and public agencies do not coordinate with one another and ask that we be given additional money in order to see that they do, it is not surprising that such requests are not met with overwhelming approval.

4. And finally, let me say that if we don't make coordination work and if we can't demonstrate its positive effects dramatically, then the public and the politicians will be more tempted to think that greater centralization through reorganization is the only alternative for improving public services.
Besides not being very healthy for many of our own agencies, I personally feel that the clients are not well served in a large, monolithic form of government. I think that research and experience have shown that some degree of tension and conflict between agencies is necessary in order to make them socially responsible. Agencies must remain responsible to each other if they are to be responsive to the needs of the public. And one way to harness that tension and to encourage responsibility is through coordination.

Thank you very much.
ACKNOWLEDGEMENTS

The speaker wishes to acknowledge the following reference documents used in the development of this presentation:


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