

The Delphi Technique is a forecasting tool with proven benefits for long-range educational planning. Designed as a consensus-building model, it can be adapted for use in short-term decision making and conflict resolution.

In the Paramus, New Jersey, Public Schools, major curriculum development and revision is done primarily by committees established by a broad-based Curriculum Council. In the total approval process, the Administrative Council, which includes all principals, has the right to review proposals approved by the Curriculum Council before they are recommended to the Board of Education. The Administrative Council, however, has rarely rejected any proposal approved by the Curriculum Council.

Recently, a committee was established by the Curriculum Council to review the existing program for gifted and talented students. The committee, composed of classroom teachers, enrichment teachers, specialists, parents, and students, sought formal representation from the principals, but none was able to serve. When the committee later presented its report to the principals, several key differences of opinion emerged. The conflict was unexpected since earlier discussions between the two groups had disclosed no major disagreements.

At this point, joint meetings held to resolve the differences only served to heighten and polarize them. Finally, both groups agreed to delegate to me the task of resolving their problem without any further joint meetings. As Curriculum Coordinator, having a "foot in both camps," I was the logical mediator. Given the need to reach consensus without common meetings, I felt a variation on the Delphi Technique would be the best tool for resolving the conflict.

The Modified Delphi Process

The standard Delphi process uses a series of statements of possible future developments. For each development, every respondent is to check the column designating the time interval when it is likely to occur, along with

REACHING CONSENSUS USING THE DELPHI TECHNIQUE

A modified Delphi Technique can be used to reach consensus in decision making and conflict resolution.

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Figure 1: "Modified Delphi Technique: Enrichment — Phase 1"

- For each statement below check the column which most reflects your position:
 A — Agree with
 B — Not certain, but willing to try for a year and evaluate
 C — Disagree with
- For each column where you check C, indicate in the space below the statement how you would like it amended (Others may also comment, if desired).

	A	B	C
Where there is strong agreement among classroom teacher, enrichment teacher, and principal that a student meets all criteria in referral (page E-6 of report), the student shall be selected without additional testing.			
Any student for whom the "pull-out" gifted program still appears to be inadequate to meet his/her needs may be referred to the Child Study Team for consideration for possible development of an Individual Educational Plan.			
In grades 6 and 7 only a core program will be provided, with grade 8 students only involved in "Olympics of the Mind" and advanced algebra. Extension of a full core program for grade 8 will be reconsidered at a later time.			

Figure 2: "Modified Delphi Technique: Enrichment — Phase 2"

Read the statements with the suggested change. Your original choice is circled. Check the column which reflects your position on the statement as amended:

- A — Agree with
 B — Not certain, but willing to try for a year and evaluate
 C — Disagree with

	A	B	C
Where there is strong agreement among classroom teacher, enrichment teacher, and principal that a student meets all criteria in referral (page E-6 of report), the student shall be selected without additional testing. (Change: Include also the selection criteria, page E-7 of report, to assure use of at least one standard objective element.)	8	3	3
Any student for whom the "pull-out" gifted program still appears to be inadequate to meet his/her needs may be referred to the Child Study Team for consideration for possible development of an Individualized Educational Plan. (Change: Add an intermediate step involving Subject Area Consultants; make enrichment teacher CST member in cases involved.)	7	3	4
In grades 6 and 7 only a core program will be provided, with grade 8 students only involved in "Olympics of the Mind" and advanced algebra. Extension of a full core program for grade 8 will be reconsidered at a later time. (Change: Provide scheduled classroom cycle as in grades 2-5; reconsider for grade 8 as soon as no additional staffing involved.)	6	4	4

choices from columns indicating desirability and potential impact of the development. When responses are gathered, the same statements are again sent to respondents, this time indicating the time span preferred by most of the respondents in the first round. The second round asks that a time span again be checked, but it also requires each respondent to give a reason if his or her choice differs from the preferred choice from round one. A third round follows a similar procedure and brings the task to completion.

I made two major modifications in the process. The statements, rather

than representing possible future developments, were policy statements representing key issues between the two groups in the gifted and talented program proposals. The complete chart contained 20 such statements. The column choices were more limited in an attempt to identify clearly the degree of polarization. Those not agreeing were asked to specify in this first phase the change they would accept. Figure 1 shows an excerpt of three statements from the actual Phase I (first round) chart used.

Phase 2 of the process involved several revisions to the original chart. Each column showed the number

who had selected that choice; each individual's initial choice was circled as a reminder of his or her original decision. In the statements portion, suggested changes were added to the originals. In this phase, the respondents were to check their preference again, whether the same or different, and indicate whether or not they would accept the modification statements. Figure 2 shows these modifications as they were made for the same three statements.

A tally of results after Phase 2 showed clear consensus (that is, not more than one person still choosing "C") for 18 of the 20 statements; two respondents still disagreed about the two remaining statements. When these results were shared, an informal Phase 3 authorization was given to endorse these final statements and recommend them to the superintendent as amendments to the original report. Subsequently, the Board of Education approved the report and the new plan was put into effect.

Advantages

This modification has the same major advantages as the basic Delphi. Anonymity makes it unlikely that consensus will be forced since no respondent knows how others, particularly those of ascribed authority, have voted. Each individual must make choices on all issues, in contrast to group meetings at which many people prefer not to express their ideas, which can result in an inaccurate tacit assumption of agreement with the positions expressed by more vocal members. I believe it improves upon the basic process by requiring that those who disagree offer specific amendments. Use of tallies by column, rather than simply indicating which column represents the group choice, gives a more accurate picture to each respondent of the general group reaction. Finally, the inclusion of the "B" choice affords a middle ground for compromise and gives a clearer picture of the degree of strength of support for the position. In the first instance, many who could not enthusiastically support the statement proved willing to let it be tried and evaluated. Many statements received almost unanimous endorsement (all or almost all "A" responses), while others were more muted (several "B" responses combined with the strong agreements).

Not a Panacea

In the situation I have described, the modified Delphi Technique was a highly useful and successful approach. Without it, basic disagreements could not have been resolved except by fiat from the superintendent, which neither he nor any of the people involved would have wanted.

However, I don't want to be misleading by suggesting that this approach is a simple panacea for all situations involving decision making or conflict resolution. A great deal of preliminary data-gathering is needed to get some assessment of potential areas of compromise. Informal meetings with key people from both groups and a variety of initial positions must be synthesized into the

initial statements. Statements must be written quite carefully to minimize the possibility that different interpretations of their meaning may occur, possibly resulting in "false" agreement. (In the actual process, several people added comments of clarification to my original statements, showing that I hadn't worded them as clearly as I thought.) Finally, the person who is serving as the "mediator" in this process must be perceived by all parties as being fair and neutral on the issues if the group is to have confidence in the results. Despite these potential problem areas, I believe the modified Delphi Technique has promise for use in similar situations for both decision making and conflict resolution. ■

What is Delphi?

The Delphi technique was an invention of the 1960s, worked out by some Rand Corporation people dissatisfied with the way committees laid plans for the future. The method has a simple, almost silly sound. Instead of having meetings, questionnaires are circulated to the members of a group, and each person writes his answers out and sends them back in silence. Then the answers are circulated to all members and they are asked to reconsider and fill out the questionnaires again, after paying attention to the other views. And so forth. Three cycles are usually enough. By that time as much of a consensus has been reached as can be reached, and the final answers are said to be substantially more reliable, and often more interesting, than first time around. In some versions, new questions can be introduced by the participants at the same time that they are providing answers.

It is almost humiliating to be told that Delphi works, sometimes wonderfully well. One's first reaction is resentment at still another example of social manipulation, social-science trickery, behavior control.

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But, then, confronted by the considerable evidence that the technique really does work—at least for future-forecasting in industry and government—one is bound to look for the possibly good things about it.

Maybe, after all, this is a way of preserving the individual and all his selfness, and at the same time linking minds together so that a group can do collective figuring. The best of both worlds, in short.

What Delphi is, is a really quiet, thoughtful conversation, in which everyone gets a chance to listen. The background noise of small talk, and the recurrent sonic booms of vanity, are eliminated at the outset, and there is time to think. There are no voices, and therefore no rising voices. It is, when you look at it this way, a great discovery. Before Delphi, real listening in a committee meeting has always been a near impossibility. Each member's function was to talk, and while other people were talking the individual member was busy figuring out what he ought to say next in order to shore up his own original position. Debating is what committees really do, not thinking. Take away the need for winning points, leading the discussion, protecting one's face, gaining applause, shouting down opposition, scaring opponents, all that kind of noisy activity, and a group of bright people can get down to quiet thought. It is a nice idea, and I'm glad it works. ■

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