Instructional consultation in postsecondary institutions is explored by examining problem solving behaviors of instructional consultants and their faculty clients. Study goals were to: determine whether instructional consultants or the faculty clients guide the discussion during instructional consultation; describe the issues discussed by instructional consultants and the faculty clients during instructional consultation; and determine how much emphasis is placed upon problem solving during instructional consultation. The research looked at: who raises problems and suggests solutions; what kinds of problems and solutions are identified; and how much time instructional consultants and their faculty clients devote to discussing problems and solutions. Fourteen pairs of instructional consultants and clients from 10 research-oriented doctorate-granting institutions participated. Instructional consultants videotaped themselves interacting with faculty clients. Two teams of trained observers noted time and source of problem/solution. Results include the following: a total of 69 problems were raised across 14 information review and planning sessions; consultants raised more problems and solutions than their clients; about one-half of all problems concerned the teacher; more than one-half of all solutions concerned pedagogical skills; discussions were quite brief, averaging only 34 seconds per problem and 30 seconds per solution; and not all problems had solutions. An appendix offers a sample conversation between consultant and client. Contains 8 references. (SM)
INSTRUCTIONAL CONSULTATION IN POSTSECONDARY EDUCATION:
PROBLEMS AND SOLUTIONS
DISCUSSED BY PROFESSORS AND CONSULTANTS

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Northwestern University

Kathleen T. Brinko,
Appalachian State University

PURPOSE OF THIS STUDY

This study explored instructional consultation in postsecondary institutions by examining the problem solving behaviors of instructional consultants and their faculty clients.

Our goals in this study were:

- To determine if, in general, instructional consultants or their faculty clients guide the discussion during instructional consultation.
- To describe the issues discussed by instructional consultants and their faculty clients during instructional consultation.
- To determine how much emphasis is placed upon problem-solving during instructional consultation.

Our research questions were:

One: Who raises problems and suggests solutions?

Two: What kinds of problems and solutions are identified?

Three: How much time do instructional consultants and their faculty clients devote to discussing problems and solutions?
Instructional consultation with feedback is individualized assistance for the purpose of improving teaching. Most commonly it consists of four steps: initial contact, initial conference, information collection, and an information review and planning session.

Our focus:

In this study we focused upon consultant and client interaction in the fourth step, the information review and planning session.
This study was motivated by the need for theoretical and practical literature on faculty development in general, and on instructional consultation in particular.

A somewhat oversimplified history -- The 1960s and 1970s:
Several circumstances contributed to the growth of faculty development as a field:

- The 18-22 year-old population was declining.
- The average age of faculty was increasing.
- The number of faculty who had achieved tenure was increasing.
- The mobility of postsecondary faculty was decreasing.
- Academia recognized that postsecondary faculty receive no specific preparation for teaching; instructional consultation was initiated.

The present context -- The 1980s:
Although many faculty developers offer instructional consultation among their faculty development services, few have received any specific training in instructional consultation.

- Of the respondents to one national survey, about half (approximately 375 persons) reported that their institution provided "consultation about teaching from trained colleagues or other instructional resource persons" (Erickson, 1986)

- Most instructional consultants report that they consult "by the seat of their pants." Only 3 of 13 (Brinko, 1988, 1989) reported any kind of preparation, and this preparation was in related fields such as counseling.

- Currently there are no degree programs or regularly offered institutes and training for faculty development or instructional consultation in postsecondary education.

---> One result: A paucity of theoretical and practical literature on instructional consultation.

Our response:
After reviewing the small body of available literature, we decided to complement it by analyzing videotapes of instructional consultants talking with their faculty clients during information review and planning sessions.
Fourteen pairs of instructional consultants and clients from ten research-oriented doctorate-granting institutions across the United States and Canada participated in the study.

N=14 pairs

<table>
<thead>
<tr>
<th>Male Consultant</th>
<th>Female Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Client</td>
<td>Male Client</td>
</tr>
<tr>
<td>4 pairs</td>
<td>4 pairs</td>
</tr>
<tr>
<td>Male Consultant</td>
<td>Female Consultant</td>
</tr>
<tr>
<td>Female Client</td>
<td>Female Client</td>
</tr>
<tr>
<td>2 pairs</td>
<td>4 pairs</td>
</tr>
</tbody>
</table>

Consultants:
- All volunteered for the study.
- Five were novice consultants, nine were experienced.
- All were employees of or volunteers in a faculty development center.
- All were from research-oriented, doctorate-granting institutions.

Clients:
- All volunteered for the study.
- All taught at the same institution as their consultant.
- All were native speakers of English.
- All were seeking feedback on instructional issues, rather than personal, organizational, or other professional issues.
- All were reported by the consultant to be "typical" clients.
Chart 5

DATA COLLECTION AND ANALYSIS

Instructional consultants videotaped themselves interacting with their faculty clients. Two teams of trained observers noted time and source of problem/solution and then transcribed that portion of the conversation.

Collecting videotapes:

- Instructional consultants were identified through professional membership rosters and invited to participate.
- Each consultant provided a videotape and a questionnaire that surveyed consultant demographics characteristics, educational attainments, and consultation practice.
- Each videotape was duplicated with a time-code.

Analyzing data:

- Two pairs of trained observers noted when a problem or solution was discussed, whether the consultant or the client initiated the discussion, the time when discussion began, and the time when discussion ended. They then transcribed the identified portions of the discussion.
- Categories for problems and solutions were derived through inspecting transcripts. The authors independently classified each problem and solution, with .81 reliability. All discrepancies were resolved through discussion.
- To answer "Who raises problems and suggests solutions," tallies were made of who raised problems and solutions, and of how many problems and solutions they raised.
- To answer "What kinds of problems and solutions were identified," each problem or solution was summarized into a few words. Categories of problems and solutions emerged from these summaries.
- To answer "How much time was devoted to discussing problems and solutions," beginning and ending points were computed.

Menges & Brinko, AERA, 1989
RESEARCH QUESTION ONE

Who raises problems and suggests solutions?

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems</td>
<td>69</td>
<td>4.9</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Solutions</td>
<td>49</td>
<td>3.5</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

1. A total of 69 problems were raised across the fourteen information review and planning sessions, an average of 4.9 problems per session.

2. A total of 49 solutions were suggested across the fourteen information review and planning sessions, an average of 3.5 solutions per session.

<table>
<thead>
<tr>
<th>Raised by</th>
<th>Raised by</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>consultant</td>
<td>client</td>
<td></td>
</tr>
<tr>
<td>Problems</td>
<td>41 (59)</td>
<td>69 (100)</td>
</tr>
<tr>
<td>Solutions</td>
<td>37 (76)</td>
<td>49 (100)</td>
</tr>
</tbody>
</table>

Numbers in parentheses are percents.

3. Consultants raised more problems than their clients. Consultants raised 41 problems, or 59 percent of all problems. Clients raised 28 problems, or 41 percent.

4. Consultants also suggested more solutions than their clients. Consultants suggested 37 solutions, or 76 percent of all solutions. Clients suggested 12 solutions, or 24 percent.
### Chart 7

#### RESEARCH QUESTION TWO

What kinds of problems and solutions are identified?

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher communication skills</td>
<td>12 (17)</td>
<td>6 (12)</td>
</tr>
<tr>
<td>Teacher pedagogical skills</td>
<td>11 (16)</td>
<td>28 (57)</td>
</tr>
<tr>
<td>Teacher prep, org, and mgt</td>
<td>12 (17)</td>
<td>11 (22)</td>
</tr>
<tr>
<td>Student attributes and behaviors</td>
<td>21 (30)</td>
<td>0 (00)</td>
</tr>
<tr>
<td>Physical environment and context</td>
<td>8 (12)</td>
<td>3 (06)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5 (07)</td>
<td>1 (02)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>69</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

Numbers in parentheses are percents.

1. **About one-half of all problems** concerned the teacher. *Teacher communication skills,* *Teacher pedagogical skills,* and *Teacher preparation, organization, and management* each accounted for about one-sixth of the total. Another one-third concerned *Student attributes and behaviors.*

2. **More than one-half of all solutions** concerned *Teacher pedagogical skills.* Another one-fifth concerned *Teacher preparation, organization, and management.*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Problems</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher communication skills</td>
<td>7 (17)</td>
<td>5 (14)</td>
</tr>
<tr>
<td>Teacher pedagogical skills</td>
<td>9 (22)</td>
<td>23 (62)</td>
</tr>
<tr>
<td>Teacher prep, org, and mgt</td>
<td>8 (20)</td>
<td>6 (16)</td>
</tr>
<tr>
<td>Student attributes and behaviors</td>
<td>9 (22)</td>
<td>0 (00)</td>
</tr>
<tr>
<td>Physical environment and context</td>
<td>4 (10)</td>
<td>2 (05)</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4 (10)</td>
<td>1 (03)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

Numbers in parentheses are percents.

3. **Of problems** raised by consultants, about half concerned *Teacher pedagogical skills* or *Student attributes and behaviors.* Of problems raised by clients, the largest category was *Student attributes and behaviors.*

4. For consultants, most **solutions** concerned *Teacher pedagogical skills.* For clients, most solutions concerned *Teacher pedagogical skills* or *Teacher preparation, organization, and management.*
RESEARCH QUESTION THREE

How much time do instructional consultants and their faculty clients devote to discussing problems and solutions?

1. Using conservative definitions of problems and solutions, raters found that discussions were quite brief, averaging only 34 seconds per problem and 30 seconds per solution.

2. What becomes apparent by viewing the tapes is the extreme subtlety and complexity of the spoken language. It is full of false starts, stops, branches, and tangents; there are no headings, paragraphs or punctuation; there are no cues, as in written speech, where one idea leaves off and another begins. Thus, our estimates are probably a good deal shorter than what participants themselves would indicate.

3. These discussions took such nonlinear and tangential forms that time codes grossly over-simplify the intricate conversational structure. (See Appendix A for a sample conversation.) This question calls for more qualitative analysis.
We also found that not all problems had solutions, that not all solutions had problems, and that one kind of problem was not always followed by the same kind of solution.

Some problems had no stated solutions.

- The ratio of problems to solutions was 7 to 5.
- Some were problems with obvious solutions, such as "I talk too fast," or "The environment you set up was busy and cluttered."
- Others were problems in which a solution simply wasn't discussed.

Some solutions had no stated problems.

- Consultants and clients sometimes verbalized only the solution, especially when the pair was reviewing data collected in the client's class. For example, when one pair was watching a videotape of the client in the classroom, the consultant merely said, "Here... use a pointer -- it's much better than your finger."

One kind of problem is not always followed by the same kind of solution.

- Problems concerning Student attributes and behaviors and problems concerning the Physical environment and context were usually followed by some other kind of solution.
- Example: A consultant identified a problem of too much student chatter during class (a problem concerning Student attributes and behavior) then suggested that the client repeat student questions to assure that all students could hear (a solution concerning Teacher).
- Example: A client complained that his department does not adequately prepare teaching assistants either in content or pedagogy (a problem concerning Physical environment and context). The consultant advised this client to remind his students that a tutor facility was available to them (a solution concerning Teacher preparation, organization, and management).
Problems to be discussed during consultation sessions may be viewed through several lenses, including the lens of attribution theory and the lens of personnel practice.

**Viewing problems through the lens of attribution theory:**

- The consultant determines to what causes the client attributes the problem (Forsyth & McMillan, 1981; Shaeffer, McGill, & Menges, 1984).
- The consultant explores the client's beliefs about the extent to which these causes are:
  - Controllable (Caused by things you can control....)
  - Internal (Caused by things about you....)
  - Stable (Caused by things that don’t change....)
- The consultant gives highest priority to problems with causes most amenable to intervention, for example, problems with causes viewed as controllable, internal, and unstable. For our results (Chart 7), more than 40 percent of problems are clearly external to the teacher (the categories of Student attributes and behavior and Physical environment and context); as expected from attribution theory, few solutions for those problems are discussed.
- Alternatively, the consultant chooses problems which can be reinterpreted in ways that make them more amenable to change, for example, reinterpreting low student motivation as unstable rather than as stable.

**Viewing problems through the lens of personnel practice:**

- The consultant assesses whether the problem is related to duties of the position, that is, related to requirements logically derived from the job description or from legal analysis (Scriven, 1987, 1988). These include such matters as:
  - Facilitating learning
  - Fulfilling ethical obligations
  - Maintaining standards of the profession
- The consultant assesses whether the problem is primarily a matter of style, that is, related to expectations about good teaching derived from statistical associations between teacher characteristics/behaviors and criteria of teaching effectiveness. These include such matters as:
  - Giving positive reinforcement to students
  - Showing enthusiasm in the classroom
  - Using higher level cognitive questions
- For our classification of problems and solutions (Chart 7), those in the first category approximate matters of duty and those in the second category approximate matters of style. About the same number of problems are in these two categories, but many more solutions are in the second category.
References


Appendix A: Sample Conversation between Consultant and Client

(Start 2:15)

Con: Well the things that you had asked me to look for were, um, you said you were having a little bit of trouble getting the student to participate in class. [Consultant -- Problem] OK, when I came to that first class, what I did was I filled this out but then I also took notes.

Cli: OK.

Con: Hopefully, like I was a student.

Cli: OK.

Con: ...and um I don't know. Maybe by looking at my notes, if that would give you any indication as to what the students were coming across with or...

Cli: Well, it certainly would help me because I don't always get the feedback from them. So at this, that's part of the reason for our doing this I think.

Con: Ok, the things that I saw, which you can see on here, were that first of all you begin a lot of your questions with "Who knows" or "Who can tell", and frequently what that does to the student, if they can't, or it makes them very reluctant...

Cli: Is that right? OK.

Con: ...to do anything, and not answer that. Because it's kind of like if you don't, you're really stupid, you know, and I know you don't mean that. [Consultant -- Problem]

Cli: Right.

Con: But that sometimes comes across that way.

Cli: OK.

Con: So, if you can...

Cli: What's a, what's a better way?

Con: Just state the question and don't preface it with anything. [Consultant -- Solution]

Cli: Don't preface it!

Con: Yeah, you know state the question. Look around and see if anybody has an inkling of what an answer might be and maybe call on that person. "Joe, can you give us the answer?" If he can't, "Can anyone help him?"

Cli: A lot of times the questions that I pose are not necessarily that I expect them to know the answer, in fact I don't.

Con: Yeah, you, you use rhetorical questions basically.

Cli: Yeah, in other words, I wanted them to sort of begin thinking how we would get started on it.

Con: Right, right!

Cli: ...and uh, trying to get them to be more involved with, what we're developing piece by piece rather than just sorta getting it from me and putting it down on paper.
Con: Right, yeah, and I think you do that well.

Cli: Ok, but I...

Con: But, just don't...

Cli: Just ask the question.

Con: Yes, just ask the questions and try not to preface it with "Who knows..." because I think the questions that you're asking, in fact most of the questions... you are familiar with Bloom's Taxonomy, kind of?

Cli: Yes.

Con: Ok, um, most of them are at the application level, and a number are at the analysis level, so you're asking questions that should elicit the type of feedback you're after.

Cli: Ok. That is at the level I'm trying to get...

Con: Yeah.

Cli: ...the students to begin thinking about.

Con: Yeah, right.

Cli: Now sophomores don't always have the sophistication, I don't think...

Con: True.

Cli: ...to do that entirely.

Con: Yeah. You may need to do more modeling, of how you would answer that question. Pose a question, let 'em think about a minute, and say, "You know, if I were answering this question, the first thing I would do is blah, blah, blah," and that, you know, do that a couple of times, and then say, "OK, now what did we say the first thing you would do in this situation?" [Consultant -- Solution]

Cli: OK.

Con: So model your thought processes and then let them work on those. [Consultant -- Solution]

Cli: OK.

Con: Because, those, um, especially the analysis level questions, they're going to... Most of them, like you said, have never thought at that level, or really haven't, especially perhaps in engineering, haven't thought at that level.

Cli: Yeah, I don't think, maybe a little bit but not really.

Con: Yeah, most of it is probably at the knowledge level or comprehension at the most. Maybe some application at this point. So you're kinda going into new territory and you need to probably help them a little bit more.

Cli: OK.

Con: But, I think the questions you are asking are excellent questions. I was looking, you know, trying to cue in on that because you had said that you want more student participation. [Consultant comes full circle back to the original problem.]

(End 6:24)