

A Pedagogical Model for Transitional English Bilingual Classrooms

Rafael Lara-Alecio
Richard I. Parker
Texas A&M University

Abstract

A pedagogical model for transitional English bilingual classrooms is developed to meet the goals of teacher training and guidance, program evaluation, and empirical validation of bilingual theories. The pedagogical model consists of four dimensions: (a) Activity Structures, (b) Language of Instruction, (c) Language Content, and (d) Communication Mode. The model defines and integrates those theoretical principles which show most promise for pedagogical usefulness, (i.e. notions which can be translated into manipulable elements of the classroom environment). Model elements also can be adjusted or manipulated by teachers to enhance student learning. Teachers can monitor themselves through model-based observation and use the results prescriptively in planning. Importantly, the model can be translated into reliably observable and codable elements. This permits its potential use in program evaluation (formative evaluation of the learning process) and in theory validation.

Introduction

Given the rich theoretical underpinnings of today's bilingual education, little direct benefit has reached teachers in bilingual classrooms. The pedagogical guidance from bilingual theory to classroom practice has been only general in nature (Cummins, 1986; Díaz, Moll, & Mehan, 1970; Fishman, 1976; Krashen, 1981a, b; Trueba & Barnett-Mizrahi, 1979; Trueba & Delgado-Gaitán, 1988; Trueba, 1979). This guidance typically takes the form of general pedagogical principles, including the following:

- provide an emotionally supportive environment;
- emphasize quality of social interaction between teacher and student;
- ensure "bilingual" status is not considered a disability;
- provide quality social interactions between teacher and student;
- provide multi-modality interactions with student;
- incorporate minority students' culture in teaching;
- guide and facilitate rather than control student learning;

- encourage student talk and independent learning;
- structure activities which facilitate quality interactions;
- encourage community participation in schooling;
- promote student intrinsic motivation;
- teach “meaningful” content;
- develop prior competency in the home language; and
- continue to develop competencies in both languages.

The generality of these propositions is understandable in that the main theoretical underpinnings for bilingual education have been transported or extended from other fields (e.g., sociology, linguistics, anthropology). Furthermore, theoretical validation research typically is not from classrooms. Research findings are translated to the classroom environment from very different contexts. Language development studies typically are based on communication in natural situations (Krashen, 1985a). Yet classrooms are much more focused, directed, and more complex language learning environments than most more “natural” situations.

The lack of instructional and curriculum guidance beyond these general principles has had two predictable results. The first is lack of definitional clarity. A wide diversity of classroom practices pass for bilingual education. Even classrooms under the same theoretical label and the same set of guiding principles may look very different inside (Cziko, 1992; Lam, 1992). The field of bilingual education has failed to operationalize and particularize its propositions and principles to offer concrete guidance to teachers. The second, and related result, is lack of demonstrable effectiveness of bilingual education (Cziko, 1992; Lam, 1992). This is understandable, because without well-defined instructional activities for bilingual education, we are unlikely to be able to well-measure their effectiveness. Trueba (1989) states “.researchers and practitioners ultimately need to find more useful theories and possible explanations that permit them to improve instructional design (p. 21).

Model Description

In response to this need, we propose a four-dimensional pedagogical model for transitional-English-bilingual classrooms. The model attempts to incorporate and operationalize elements of classroom instruction supported by commonly espoused principles of bilingual education (such as those enumerated above). These

elements of instruction are depicted as interrelated dimensions of the model. The elements are four: (a) Activity Structures, (b) Language of Instruction, (c) Language Content, and (d) Communication Mode.

The purposes of this model are three. First, we wish to specify and integrate those theoretical notions which show most promise for pedagogical utility (i.e. notions which can be translated into manipulable elements of the classroom environment). In addition, we wish to identify classroom elements which teachers have the ability to adjust to enhance student learning. Second, we seek a pedagogical model which can be validated (i.e. can be translated into reliably observable and codable elements). Our third purpose is to create an observational tool with potential use for formative program evaluation—for formative judgments about the presence and absence of valued elements in the learning process. To serve this last purpose, it would usually be used in conjunction with measures of student performance.

Activity Structures. Vygotsky influential notion of Zone of Proximal Development (ZPD) requires that educators attend to the social and task structure of each learning activity (Cole & Griffin, 1983). The emphasis is on the context of instruction, in addition to the traditional content of instruction. Classroom ethnographers focus on the “structure of events” each structure type with its own opportunities, implied values and expectations for student participation (Erickson, 1982). Our traditional pedagogical emphasis on “the lesson”, with its objectives, curriculum content, and assignments, ignores these “activity structures”.

Though not commonly attended to in public schools, the concept of activity structures has extensive research support (Doyle, 1986). Activity structures are teacher-structured learning situations, each with its own expectations for teacher and student communication (Brophy & Evertson, 1978; Doyle, 1981). Activity structures are relatively stable, recurring periods of activity, each with a recognized purpose and opportunities for communication. Communication which is expected, appropriate, and fostered in one activity structure may be inappropriate and discouraged in a second. Activity structures are intuitively appealing to teachers, though practitioners rarely referred to them by name. Activity structures are the essential building blocks of teacher planning and organization, playing a larger role than “goals and objectives” (Berliner, 1983; Doyle, 1981; Gump, 1987).

Multiple activity structure observation and coding schemes exist (Berliner, 1983; Burns & Anderson, 1987; Stodolsky, Ferguson, & Wimpelberg, 1981; Yinger, 1977). For our model, we have borrowed most heavily from Burns and Anderson (1987), with their emphasis on teacher and student expectations in defining activity structures. Our activity structure codes and definitions are included as Appendix A. In a previous study of over 40 observation hours in 8 classrooms, we obtained good reliability (Cohen's Kappa = .82 - .98) in coding activity structures (Parker, Tindal, & Hasbrouck, 1994).

Language Content. The second dimension of our pedagogical model, "Language Content" derives directly from Cummins's (1986) influential distinction of Basic Interpersonal Communications Skills (BICS) and Cognitive-Academic Language Proficiency (CALP) language competencies. Cummins contends that LEP students first need to develop English skills in BICS, followed by CALP over a period of five to seven years. This recommendation has led to a few unfortunate outcomes. First, the long time period for CALP development, coupled with high student turnover, has discouraged program evaluation efforts (Willig, 1985). Second, the dichotomy between CALP and BICS has obscured the large amount of classroom communication which exists on a continuum between BICS and CALP.

Cummins' concepts have been challenged in the field on the basis of being too general, simplistic, not responsive to contextually specific competencies (Trueba, 1989). Within our model, we reformulated BICS and CALP as malleable levels of discourse, rather than as fixed or long-term abilities. We also agree with the charge that the two-tiered BICS/CALP distinction is too simplistic to describe varying student abilities in a range of activities which we witness in Texas bilingual classrooms. Therefore, we have interspersed two additional levels to create a total of four levels of language content: 1. Social Routines (i.e., social exchanges and conversation); 2. Academic Routines (i.e., preparing for recess, returning books, learning strategies, handing in assignments, structuring homework); 3. Light Cognitive Content (i.e., current events, discussion of the school fiesta, multicultural education issues, also repetitive drill or skills practice); and 4. Dense Cognitive Content (i.e., new content-area information, conceptually loaded communication with specialized vocabulary and procedures).

Cummins (1984) hypothesized in his Common Underlying Proficiency (CUP) Model that “the literacy related aspects of a bilingual’s proficiency in L1 (native language) and L2 (second language) are seen as common or interdependent across languages.” (pp. 23-24). In other words, a child’s native language proficiency will facilitate the process of a second language acquisition. Conversely, a child who fails to first develop L1 proficiency may be cognitively retarded in both languages (Cummins, 1986). Language-minority children who immigrate already able to read, learn to read in English much easier than students who arrive with little or no reading skill in L1. Also, content areas (e.g. science, social studies) learned in the first language are retained when instruction shifts to the second language (Chomsky, 1988; Krashen, 1985b).

From this evidence it is commonly inferred that CALP in L1 must precede BICS in L2, and that L1 CALP accelerates later English CALP. But will English CALP readily occur after native language CALP is established, presumably over several years? The notion of prerequisite development offers little guidance to teachers in how the L1 to L2 CALP may be accelerated. Our model implies not general developmental prerequisites, but rather strategic incremental shifts in emphasis over time. It suggests that the transition from L1 to L2 occurs incrementally, and possibly at different rates and times for different activity structures or language modes. For example, students may be ready for English instruction for Level II: Academic Routines, but maintained in their L1 for Level III: Light Cognitive Content. The teacher identifies the level for each activity structure, and accordingly uses L2 or L1. This suggestion to select the language by activity structure does not violate the warning against frequent code-switching, which can produce confusion (Hoffman, 1991). This is because activity structures are relatively stable, commonly changing two to five times per hour (Doyle, 1981).

Language of Instruction. The third dimension of our model also is something over which teachers have direct control: the mixture of L1 and L2 in carrying out content instruction. Content areas provide a rich source of input for limited English proficiency (LEP) children (Cummins, 1986). For second language learners, a subject matter such as science can serve as the content vehicle for language learning (Krashen, 1985a). The best supported position on language mix in bilingual education is that a knowledge base for

the content be provided in the native tongue before English is used to further develop the content, or before the content should serve as a vehicle for English language instruction. The “bilingual threshold” hypothesis posits transference of a students’ content learning across the two languages (Cummins, 1986; Krashen, 1981). Our pedagogical model offers an alternative to an either/or L1/L2 choice, which appears both more complex and more realistic. It presents four progressive types of English use in the classroom. These alternatives are four different combinations of native language and English: I. Content Presented in L1 (indicates Spanish-only instruction, a beginning point for students with very low English proficiency); II. L1 Introduces L2 (indicates instruction primarily in L1, but additionally, English vocabulary is taught for key ideas concepts and procedures); III. L2 Clarified by L1 (indicates instruction primarily in English, but with L1 used as “back-up” as needed, to ensure understanding); and IV. Content Presented in L2 (indicates English-only instruction, the goal). The order of these four combinations may change and overlap. A particular class and subject area may require a temporary move backward to a language mix with greater L1 support.

Language Mode. Both Cummins’ (1986) “reciprocal interaction model” and the “context-specific” model (Díaz et al, 1970) support the practice of multiple modalities within particular activity structures. These modalities (especially reading, writing, and verbal expression) also are meaningful to teachers as curriculum content areas. These modalities can be mutually supportive, and are often integrated within a lesson. Their differentiation within our model, however, is to indicate that English facility may vary greatly by mode, and that each mode should be permitted to progress at the fastest rate possible. This may mean that students are permitted to produce an essay exam in L1 on a difficult topic following a lecture presented in English. It may mean that students are expected to read an assignment in English, but follow-up discussion is conducted in L1. This flexible procedure permits maximum progress in content curriculum coverage. The two previous examples demonstrate the overlap between this Communication Mode dimension and the Language of Instruction dimension discussed earlier.

Utility of the Pedagogical Model

We have presented a pedagogical model with four dimensions: Activity Structures, Language Content, Language of Instruction,

and Communication Mode. The model is pedagogical in that it attempts to integrate important elements of bilingual education theory for the purposes of improving classroom instruction. Particularly, the model should be useful in collecting observational data to guide teachers to efficiently transition LEP students to English. A classroom observer could use the model dimensions to provide objective feedback to the teacher on what activity structures he or she had planned, and how they had used L1 and L2 within the lesson or school day.

Alternatively, for lesson-planning decisions, the teacher would first identify the series of individual Activity Structures which will make up the school day. (see Appendix) Next, for each activity structure, the Language Content and the Communication Mode are specified. The teacher then reflects on students' language skills. From these inputs, the teacher would finally decide upon the Language of Instruction for each Activity Structure.

For progress monitoring and program evaluation, periodic classroom observations would provide teachers with feedback on desired L1 to L2 shifts in Language of Instruction for particular Language Content classes over time.

Finally, the operationalized model would be useful for measuring fidelity of implementation of a district program with particular goals. For example, a program expecting increased full use of English by teachers for Social and Academic Routines or use of L1 mainly to clarify L2, could measure that occurrence.

Model Validation

In a field with a surplus of theoretical and advocacy literature and a deficit of empirical data, validation of a new model is essential. By empirical validation, we mean demonstrating that the model (a) possesses explanatory and predictive power, over time (stability), and across a range of classroom situations (generalizability), (b) is instructionally useful (positively affects student growth when used for lesson planning), (c) is parsimonious (simply integrates a large number of variables), and (d) interrelates with other pedagogical models.

Prior to model validation, we need evidence that classroom learning activities can unambiguously be classified as model dimensions, by independent raters. Reliability should be established by in-situ observation in transitional bilingual classrooms and coding of individual activity structures on each model dimension:

Activity Structures, Communication Mode, Language of Instruction, and Language Content. Once these dimensions can be reliably identified in a few classrooms, a range of grade levels and English proficiency should be observed and coded.

The explanatory and predictive power of the model can be assayed in at least five ways. First, data collected over time from a given classroom and teacher should exhibit sufficient stability to permit a given classroom to be described in terms of the model. Second, a macro-level, model-based empirical description of the classroom should mirror the espoused philosophy of the program and teacher. Third, on a micro-level, teacher intentions and plans for a particular lesson should be reflected in observational data. Fourth, model-based observation data should reflect student English language skill levels in the four modes. The fifth, and possibly the most powerful form of model validation, would involve testing its instructional validity (i.e. its prescriptive use to increase teaching efficiency). Formative or summative assessment of student skill growth would provide evidence for this validity test. Thus, the model would serve as an intervention, a means of feeding classroom observational data back to teachers.

In the field of bilingual education, theory and advocacy have sometimes substituted for solid, empirical data. This has resulted both in the lack of a data-base of knowledge and in lack of solid, detailed feedback and guidance to bilingual teachers. Our four-dimensional theoretical model is a tentative step toward providing theory-consistent, yet specific, concrete data to teachers on the process of transitional bilingual instruction. As it now stands, the model itself is theoretical, and fails to offer a solution. However, we constructed the model with consideration for direct observation, coding, and summarizing of model dimensions. We have already embarked on the first step of obtaining reliable interrater observational results. Model validation will occupy a series of following steps. We recognize that the model does not include a collection of student language proficiency or achievement data; that could be added for classroom process-product comparisons. We have focused instead on providing useful formative information on the bilingual instructional process, for use in teacher self-monitoring, preservice or inservice training, program evaluation, or field research. Perhaps most promising among these is teachers' self-monitoring through model-based observation and prescriptive use of the results to adjust instruction.

References

- Berliner, D. 1983. Developing conceptions of classroom environments: Some light on the T in classroom studies of ATI. *Educational Psychologist*, 18(1), 1-13.
- Brophy, J. & Evertson, C. 1978. Context variables in teaching. *Educational Psychologist*, 12, 310-316.
- Burns, R. B., & Anderson, L. W. 1987. The activity structure of lesson segments. *Curriculum Inquiry*, 17(1), 31-53.
- Chomsky, N. 1988. *Language and problems of knowledge: The Managua lectures*. Cambridge, Mass: MiT.
- Cole, M. & Griffin, P. 1983. A socio-historical approach to remediation. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, 5, (4), 69-74.
- Cummins, J. 1984. The role of primary language development in promoting educational success for language minority students. In Evaluation, Dissemination, Assessment Center (ed.) *Schooling and language minority students. A theoretical framework*. Los Angeles, CA: California State University.
- Cummins, J. 1986. Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56, (1) 18-35.
- Cziko, G. A. 1992. The evaluation of bilingual education: From necessity and probability to possibility. *Educational Researcher*, 21, 10-15.
- Díaz, S., Moll, L.C., & Mehan, H. 1970. Sociocultural resources in instruction: A context-specific approach. In *Beyond language: Social and cultural factors in schooling language minority students* (pp. 187-230). Sacramento, CA: Bilingual Education Office, California State Department of Education.
- Doyle, W. 1981. Research on classroom contexts. *Journal of Teacher Education*, 32, 3-6.

Doyle, W. 1986. Classroom organization and management. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 392-431). New York: Macmillan.

Erickson, F. 1982. Classroom discourse as improvisation: Relationships between academic task structure and social participation structure in lessons. In L.C. Wilkinson (Ed.) *Communicating in the classroom* (pp. 119-158). New York: Macmillan.

Fishman, J. 1976. *Bilingual education: An international sociological perspective*. Rowley, MA: Newbury House.

Gump, P. V. 1987. School and Classroom Environments, In I. Altman and D. Stokols (Eds.), *Handbook of environmental psychology*. (pp. 691-732), New York: Wiley.

Hoffman, C. 1991. *An Introduction to Bilingualism*. London: Longman.

Krashen, S. 1981a. *Second language acquisition and second language learning*. Oxford: Pergamon Press.

Krashen, S. 1981b. Bilingual education and second language acquisition theory. In *Schooling and language minority students: A theoretical framework*. California State Department of Education. Los Angeles: California State University.

Krashen, S.D. 1985a. *The input hypothesis. Issues and implications*. London: Longman.

Krashen, S.D. 1985b. *Input in second language acquisition*. Oxford: Pergamon Press.

Lam, T.C.M. 1992. Review of practices and problems in the evaluation of bilingual education. *Review of Educational Research*, 62, 181-203.

Parker, R. Tindal, G., & Hasbrouck J. 1994. *Observing activity structures in classrooms: The activity structures scale*, (unpublished manuscript): University of Oregon.

Stodolsky, S. S., Ferguson, T. L., & Wimpelberg, K. 1981. The recitation persists, but what does it look like? *Journal of Curriculum Studies*, 13, 121-130.

Trueba, H. & C. Barnett-Mizrahi, C. (Eds.) 1970. *Bilingual multicultural education and the professional. From theory to practice*. Rowley, MA: Newbury House.

Trueba, H. 1979. Bilingual education models: Types and designs. In H. Trueba & C. Barnett-Mizrahi (Eds.) *Bilingual multicultural education and the professional: From theory to practice* (pp. 54-73). Rowley, MA: Newbury House.

Trueba, H. T. 1989. *Raising silent voices. Educating linguistic minorities for the 21st century*. Boston: Heinle & Heinle.

Trueba, H. T., & Delgado-Gaitán, C. 1988. *School and society. Learning content through culture*. New York: Praeger Publishers.

Yinger, R. J. 1977. *A study of teacher planning: Description and theory development using ethnographic and information processing methods*. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Appendix

Brief Definitions of Activity Structure Codes

I. ACADEMIC ACTIVITIES

A. TEACHER BEHAVIORS [WHICH DRIVE STUDENT BEHAVIORS]

- LEC [LECTURES]:** Teacher lectures or in any manner directly instructs students about content/subject matter/skills; presents information verbally or on a chart, overhead, chalkboard or using audio-visual materials (film, video-tape, audio-tape, etc.); explains, shows how something works (but not a demonstration; see DEM).
- DIR [DIRECTS]:** Teacher gives directions, orders, directives, requests about the procedures to follow or the format to use for academic assignments.
- DEM [DEMONSTRATES]:** Teacher demonstrates or models desired student academic performance. DEM involves the teacher demonstrating/modeling to students something they will later perform themselves. DEM includes teaching by demonstration such skills as hallway behavior or safety procedures to primary students, or self-help skills to very low-skilled students.
- LED [LEADS]:** Teacher leads students through a desired performance while students perform the task with or slightly behind the teacher.
- ASK [ASKS]:** Teacher verbally asks questions related to content/subject matter/skills; asks/directs students to perform a content/subject/skills related task. Teacher's behavior during a teacher-led/controlled discussion.

B. TEACHER BEHAVIORS [DRIVEN BY STUDENT BEHAVIORS]

EV [EVALUATES]: Any overt teacher behavior which is part of a judgment of correctness or quality of a content/subject matter/skills response or performance. EV includes teacher giving academic feedback to students and making verbal corrections.

ANS [ANSWERS]: Verbally answering content/subject matter/skills area questions from students;making clarifications. Teacher's behavior during a student-led/controlled discussion.

OBS [OBSERVES]: Observing or supervising students during academic activities including informal socializing with students. OBS includes those times when a teacher may be physically in the room but is not actively engaged in overt observation or supervision.

NOTE: When a student(s) or visitor functions in the role of the teacher or performs over a period of time, record the student/visitor behavior using the appropriate "teacher behavior" code as defined above, but CIRCLE the coding.

C. STUDENT BEHAVIORS

LIS [LISTENS]: Passive listening, watching.

ASK [ASKS]: Student asking questions related to content/subject matter/skills. Student behavior during student-led/controlled discussion.

PER [PERFORMS]: Student performs an academic task; a response to a directive; note-taking; paraphrasing.

ANS [ANSWERS]: A fairly brief verbal response to a content/subject matter/skills area question. Student answers questions related to skills/subject area; student behavior during a teacher-led/controlled discussion.

DIS [DISCOVERS]: Discovering an answer to a content/subject matter/skills question or problem; involves trial and error, exploratory learning. Students work individually.

COP [COOPERATES]: Cooperatively learning or helping each other. Students work in groups of 2 or more.

D. INTERACTIVE INSTRUCTION

Teaching with active student responding, typical of direct instruction or ITIP lessons. Teacher models, leads, tests students and where students perform and orally respond to questions as an integral part of instruction.

II. NON-ACADEMIC ACTIVITIES

FEED [FEEDBACK]: Giving positive or negative verbal feedback to students about their non-academic behavior; includes activities related to discipline of students.

FREE [FREE TIME]: Free time or play.

TRAN [TRANSITION/HOUSEKEEPING]: Beginning and end-of-day activities including managerial routines such as

taking attendance, collecting money, lunch count, cleaning desks, etc.; setting up or preparing for an activity; putting away materials/supplies following an activity. Includes non-academic discussion, demonstration, directives for social behaviors which occur within the classroom.

INT [INTERRUPTION]: Any interruption to the classroom instructional activity including fire drills, intercom messages, unplanned visitors, child becoming ill, etc.

OUT [OUTSIDE OF CLASSROOM]: Activity on the playground, hallway, bus area, cafeteria, in assemblies, etc.

OTHER: Other non-academic activities.