

Dissertation Title:

The integration of language and content: Form-focused instruction in a content-based language program

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Summary:

Effective grammar instruction for adult language learners has long been a concern for research and practice in the field of second language acquisition. In more recent years, traditional notions of the place of grammar instruction have been challenged by contexts of communicatively oriented language teaching such as content-based language teaching. In the present study, effective grammar instruction is investigated in a content-based language classroom and framed as the relationship between content/meaning and language/form.

Content-based language teaching has gained widespread acceptance as an effective approach in a range of educational settings for adults and children. Yet, instruction varies widely with regard to how this integration is achieved and more specifically how to achieve a balance between attention to content and attention to language. One approach to this question draws from research in form-focused instruction (FFI), which describes various instructional options that draw learners' attention to form in primarily meaning and content-based classrooms. Research investigating the effectiveness of FFI has generally shown that a focus on form and meaning is more effective than a focus on meaning alone. While widely accepted that FFI has a positive impact on language learning outcomes in a variety of contexts, FFI research in content-based language programs for adults has been limited. Research in adult CBLT programs has revealed that a focus on language form has not been widely adopted (Musumeci, 1996; Pica, 2002) and there is concern that explicit attention to language will detract from attention to content in such programs (Klee & Tednick, 1997; Toth, 2004; Zyzik & Polio, 2008). Questions remain as to the effect of FFI on attention to content in content-based language programs for adults.

The purpose of the study was to investigate the effects that introducing FFI into a content-based language program would have on language and content learning as well as the effect on learner awareness of content and language in their instruction. The study was carried out in a program designed to prepare adult newcomers to Canada for employment as Early Childhood Educators. Two groups of adult learners at an intermediate level of English language proficiency participated in the study, 16 in one group and 20 in the other. Both groups attended class five hours per week, either once a week on Saturday or twice a week in the evening. The same teacher taught both classes. The courses included the same content but the teacher differentiated how language was addressed: in one group, here known as the form-focused (FF) group, she

included strategies and material that drew the learners' attention to language form while in the other group, the meaning-focused (MF) group, she focused exclusively on the content with no attention to language form. The instruction lasted for 10 weeks. During three weeks of that time, the FF group received content-based instruction that included grammar explanations, corrective feedback, and tasks that focused on the specific grammar forms. During the same period, the MF group received content instruction with no focus on form.

A quasi-experimental, pre-test/post-test design was adopted to determine the effect of the instruction. Learners in both groups were tested on their knowledge and ability to use the forms on written and oral pre-tests before the experimental instruction began. This was repeated 10 weeks later after FFI was delivered three times, as post-tests, and 12 weeks later after a period in which both groups were taught content only. Content knowledge was also tested in a pre-test and then again after each of the lessons that included a focus on form. In addition, during the same lesson in which learners received FFI, learners in both groups were asked to report what they believed to be the focus of the experimental instruction – a focus on language form or a focus on content.

The results of the language and content measures were analysed using ANOVA, or ANCOVA where pre-test differences existed. The findings showed no advantages on the language tests for the participants who had received the form-focused instruction. However, analysis of the content tests showed that the FF group, the one that had received the focus on form, outperformed the MF group that had received instruction only on the content. With regard to the reports completed by the learners, the results indicated that the participants were able to identify the focus of the instruction they received, whether the focus of the instruction was content or language. However, no correlation between awareness of language and language development was found.

What are the implications of these findings for teachers making decisions about the place of grammar instruction in content-based classrooms? At first blush, the findings do not lend support to claims that introducing a focus on form will improve grammatical accuracy more than maintaining an exclusive focus on content/meaning so the question remains as to the value of grammatical instruction in this kind of classroom. However, an examination of audio recordings of the experimental instruction shows that the FFI actually delivered had not included extensive corrective feedback as had been planned. This raises questions about the role of corrective feedback in helping learners make connections between form and meaning, particularly when it is provided along with other strategies designed to focus learners' attention to form such as grammatical explanations and form - focused tasks. There is evidence to suggest that corrective feedback can enhance the effectiveness of other FFI strategies such as those used in this study (see Lyster, 2004). This raises the possibility that if the FFI had been fully exploited, the results of the language measures might have shown an advantage for the group that received a focus on form.

On the question of whether a focus on form has a negative effect on attention to content, the findings showed that not only was content-learning not negatively affected, a rationale cited by content-based teachers as a reason not to focus on form, the results suggest that content learning was enhanced by a focus on form. The provision of FFI may have contributed to the learners' language proficiency in terms of receptive development which may have helped learners understand the language used in the content but could not be captured adequately by the production based language measures used in this study. This study suggests that teachers who are considering introducing a focus on grammatical form in content-based classrooms

should consider the effect of various strategies such as corrective feedback when making pedagogical decisions. Teachers who have been convinced of the negative effect of a focus on form on content learning might consider these findings an invitation to reconsider their position about the role of grammar instruction in content-based language classes.

References

- Alanen, R. (1995). Input enhancement and rule presentation in second language acquisition. In R. Schmidt (Ed.), *Attention and awareness in foreign language learning and teaching* (pp. 259-302). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Alegria de la Colina, A., & Garcia Mayo, M. P. (2007). Attention to form across collaborative tasks by low-proficiency learners in an EFL setting. In M. P. García Mayo (Ed.), *Investigating tasks in formal language learning* (pp. 91-116). Clevedon, England: Multilingual Matters.
- Allwright, D. (1984). Why don't learners learn what teachers teach? The interaction hypothesis. In D. Singleton, & D. Little (Eds.), *Language learning in formal and informal contexts* (pp. 3-18). Dublin, Ireland: Irish Association for Applied Linguistics.
- Anderson, J. R., & Reder, L. M. (1979). An elaborative processing explanation of depth of processing. In L. S. Cermak, & F. I. M Craik (Eds.), *Levels of processing in human memory* (pp. 385-403). Hillsdale, NJ: Lawrence Erlbaum.
- Anmar, A., & Spada, N. (2006). One size fits all? Recasts, prompts, and L2 learning. *Studies in Second Language Acquisition*, 28(4), 543-574.
- Barwell, R. (2005). Integrating language and content: Issues from the mathematics classroom. *Linguistics and Education: An International Research Journal*, 16(2), 205-218.
- Benati, A. (2005). The effects of processing instruction, traditional instruction and meaning-output instruction on the acquisition of the English past simple tense. *Language Teaching Research*, 9(1), 67-93.
- Bigelow, M. H. (2000). A study of noticing in SLA: The effects of combined focus-on-form techniques and task demands (Vol. 1). (Doctoral dissertation, Georgetown University, Graduate School of Arts and Sciences, 1990). *Dissertation Abstracts International*, 62 (04), 1390
- Birch, G. (2005). Balancing fluency, accuracy and complexity through task characteristics. In C. Edwards, & J. Willis (Eds.), *Teachers exploring tasks in English language teaching* (pp. 228-241). New York, NY: Palgrave Macmillan.
- Bogaert, N., Van Gorp, K., Bultynck, B., Lanssens, A., & Depauw, V. (2006). Task-based language teaching in science education and vocational training. In K. Van den Branden (Ed.), *Task-based language education: from theory to practice* (pp.106-128). Cambridge, England: Cambridge University Press.
- Brinton, D. M., Snow, M. A., & Wesche, M. (2003). *Content-based second language instruction*. Ann Arbor, MI: University of Michigan.

- Burger, S., & Chretien, M. (2001). The development of oral production in content-based second language courses at the University of Ottawa. *Canadian Modern Language Review*, 58(1), 84-102.
- Burger, S., & Doherty, J. (1992). Testing receptive skills within a comprehension-based approach. In R. J., Courchêne, J. I. Glidden, J. St. John, & C. Therien (Eds.), *Comprehension-based second language teaching* (pp 299-318). Ottawa, Canada: University of Ottawa Press.
- Burger, S., Wesche, M., & Migneron, M. (1997). Late, late immersion: Discipline-based second language teaching at the University of Ottawa. In R. K. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 65-84). Cambridge, England: Cambridge University Press.
- Bygate, M., Skehan, P., & Swain, M. (2001). (Eds.), *Researching pedagogical tasks: Second language learning, teaching and testing*. Essex, England: Pearson Education.
- Cadierno, T. (1995). Formal instruction from a processing perspective: An investigation into the Spanish past tense. *Modern Language Journal*, 79(2), 179-193.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1-47.
- Carroll, S., & Swain, M. (1993). Explicit and implicit negative feedback: An empirical study of the learning of linguistic generalizations. *Studies in Second Language Acquisition*, 15(3), 357-386.
- Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course*. Boston, MA: Heinle & Heinle.
- Chamot, A. U., & O'Malley J. M. (1994). *The CALLA handbook : Implementing the cognitive academic language learning approach*. Reading, MA: Addison-Wesley.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. New York, NY: Routledge/Falmer.
- Courchêne, R. (1992). A comprehension-based approach to curriculum design. In R. J. Courchêne, J. I. Glidden, J. St. John, C. Therien (Eds.), *Comprehension-based second language teaching* (pp. 95-118). Ottawa, Canada: University of Ottawa.
- Crandall, J., & Kaufman, D. (2005). *Content-based instruction in primary and secondary school settings*. Alexandria, VA: TESOL
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. Avon, England: Multilingual Matters.

- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Buffalo, NY: Multilingual Matters.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. Philadelphia, PA: Benjamin.
- Davison, C. (2005). Learning your lines: Negotiating language and content in subject English. *Linguistics and Education: An International Research Journal*, 16(2), 219-237.
- Day, E. M., & Shapson, S. M. (1991). Integrating formal and functional approaches to language teaching in French immersion: An experimental study. *Language Learning*, 51(1), 47-80.
- DeKeyser, R., Salaberry, R., Robinson, P., & Harrington, M. S. (2002). What gets processed in Processing Instruction? A commentary on Bill VanPatten's "Processing Instruction: An update". *Language Learning*, 52(4), 805-823.
- Doughty, C. (2001). Cognitive underpinnings of focus on form. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 206-257). New York, NY: Cambridge University Press
- Doughty, C., & Varela, E. (1998). Communicative focus on form. In C. Doughty & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 114-138). New York, NY: Cambridge University Press.
- Doughty, C., & Williams, J. (1998a). *Focus on form in classroom second language acquisition*. New York, NY: Cambridge University Press.
- Doughty, C., & Williams, J. (1998b). Pedagogical choices in focus on form. In C. Doughty, & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 197-261) New York, NY: Cambridge University Press.
- Egi, T. (2004). Verbal reports, noticing, and SLA research. *Language Awareness*, 13, 243-264.
- Egi, T. (2007). Interpreting recasts as linguistic evidence: The roles of linguistic target, length, and degree of change. *Studies in Second Language Acquisition*, 29(4), 511-537.
- Ellis, N. C. (2004). The processes of second language acquisition. In B. VanPatten, J. Williams, S. Rott, & M. Overstreet (Eds.), *Form-meaning connections in second language acquisition* (pp. 50-76). Mahwah, NJ: Lawrence Erlbaum.
- Ellis, N.C. (2005). At the interface: dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition*, 27, 305-352.
- Ellis, R. (2001). Investigating form-focused instruction. *Language Learning*, 51(1), 1-46.
- Ellis, R. (2002). Does form-focused instruction affect the acquisition of implicit knowledge? *Studies in Second Language Acquisition*, 24(2), 223-236.

- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford, England: Oxford University Press.
- Ellis, R. (2005). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly*, 40(1), 83-107.
- Ellis, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition*, 28(2), 339-368.
- Ellis, R. (2007). The differential effects of corrective feedback on two grammatical structures. In A. Mackey (Ed.), *Conversational interaction in SLA* (pp. 339-360). Oxford, England: Oxford University Press.
- Ellis, R., & Barkhuizen, G. (2005). *Analysing learner language*. Oxford, England: Oxford University Press.
- Ellis, R., Loewen, S., & Erlam, R. (2006). Implicit and explicit corrective feedback and the acquisition of L2 grammar. *Studies in Second Language Acquisition* 28(2), 339-368.
- Ellis, R., Sheen, Y., Murakami, M., & Takashima, H. (2008). The effects of focused and unfocused written corrective feedback in an English as a foreign language context. *System*, 36, 353-371.
- Fotos, S. (1994). Integrating grammar instruction and communicative language use through grammar consciousness-raising tasks. *TESOL Quarterly*, 28, 323-351.
- Fotos, S., & Ellis, R. (1991). Communicating about grammar: A task-based approach. *TESOL Quarterly*, 25, 605-628.
- Gaffield-Vile, N. (1996). Content-based second language instruction at the tertiary level. *ELT Journal*, 50(2), 108-114.
- Garcia Mayo, M. P. (2002). The effectiveness of two form-focused tasks in advanced EFL pedagogy. *International Journal of Applied Linguistics*, 12(2), 156-175.
- Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Rowley, MA: Newbury House.
- Genesee, F. (1994). *Integrating language and content: Lessons from immersion*. Santa Cruz, CA: National Center for Research on Cultural Diversity and Second Language Learning.
- Gianelli, M. (1997). Thematic units: Creating environment for learning. In M. A. Snow, & D. M. Brinton (Eds.), *The content-based classroom. Perspectives on integrating language and content* (pp. 142-148). White Plains, NY: Addison Wesley Longman.
- Graham, J. G., & Beardsley, R. S. (1986). English for Specific Purposes: Content, language and communication in a pharmacy course model. *TESOL Quarterly*, 20(2), 227-245.

- Grabe, W., & Stoller, F. L. (1997). Content-based instruction: Research foundations. In M. A. Snow, & Brinton, D. M. (Eds.), *The content-based classroom. Perspectives on integrating language and content* (pp. 5-21). White Plains, NY: Addison Wesley Longman.
- Grim, F. (2008). Integrating focus on form in L2 content-enriched instruction lessons. *Foreign Language Annals*, 41(2), 321-346.
- Han, Z. (2008). On the role of meaning in focus on form. In Z. Han (Ed.), *Understanding second language process* (pp. 45-79). New York, NY: Multilingual Matters.
- Harley, B. (1989). Functional grammar in French immersion: A classroom experiment. *Applied Linguistics*, 19, 331-359.
- Harley, B. (1992). Aspects of oral second language proficiency of early immersion, late immersion and extended French students at grade 10. In R. J. Courchêne, J. I. Glidden, J. St. John, & C. Therien (Eds.), *Comprehension-based second language teaching* (pp. 371-388). Ottawa, Canada: University of Ottawa Press.
- Harley, B., Cummins, J., Swain, M., & Allen, P. (1990). The nature of language proficiency. In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds.), *The development of second language proficiency* (pp. 7-25). New York, NY: Cambridge University Press.
- Harley, B., & Swain, M. (1984). The interlanguage of immersion students and its implications for second language teaching. In A. Davies, C. Cripser, & A. Howatt (Eds.), *Interlanguage* (pp. 291-311). Edinburgh, Scotland: Edinburgh University Press.
- Henze, R., & Katz, A. (1997). What do VESL and content-based instruction have in common? In M.A. Snow, & D. M. Brinton. (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 355-359). White Plains, NY: Addison Wesley Longman.
- Hinkel, E. (1997). The past tense and temporal verb meanings in a contextual frame. *TESOL Quarterly*, 31(2), 289-313.
- Hymes, D. (1971). *On communicative competence*. Philadelphia, PA: University of Pennsylvania Press.
- Izumi, S., & Bigelow, M. (2000). Does output promote noticing and second language acquisition? *TESOL Quarterly* 34(2), 239-278.
- Izumi, S., Bigelow, M., Fujiwara, M., & Fearnow, S. (1999). Testing the output hypothesis: Effects of output on noticing and second language acquisition. *Studies in Second Language Acquisition*, 21, 421-452.
- Jourdenais, R. (2001). Protocol analysis and SLA. In P. Robinson (Ed.), *Cognition and second language instruction*. (pp. 354-375). Cambridge, England: Cambridge University Press.

- Kasper, L. F. (1995). Theory and practice in content-based ESL Reading Instruction. *English for Special Purposes*, 14(3), 223-230.
- Klahn, N. (1997). Teaching for communicative and cultural competence: Spanish through contemporary Mexican topics. In B. Stryker, & B. L. Leaver (Eds.), *Content-based instruction in foreign language education: Models and methods*. (pp. 200-218). Washington, DC: Georgetown University Press.
- Klee, C. A., & Tedick, D. J. (1997). The undergraduate foreign language immersion program in Spanish at the University of Minnesota. In S. B. Stryker, & B. L. Leaver (Eds.), *Content-based instruction in foreign language education: Models and methods*. (pp. 173-218). Washington, DC: Georgetown University Press.
- Kowal, M., & Swain, M. (1994). Using collaborative language production tasks to promote students' language awareness. *Language Awareness*, 3(2), 73-93.
- Kowal, M., & Swain, M. (1997). From semantic to syntactic processing: How can we promote it in the immersion classroom? In R. K. Johnson, & M. Swain (Eds.), *Immersion education: International perspectives* (pp.284-310). Cambridge, England: Cambridge University Press.
- Krashen, S. (1982). *Principles and practices in second language acquisition*. Oxford, England: Pergamon Press.
- Krashen, S. D., & Terrell, T. (1983). *The Natural Approach*. Oxford, England: Pergamon.
- Krueger, M., & Ryan, F. (1993). *Language and content: Discipline- and content-based approaches to language study*. Lexington, MA: D.C. Heath and Company.
- Lapkin, S., & Swain, M. (1977). The use of English and French cloze tests in a bilingual education program evaluation: Validity and error analysis. *Language Learning*, 27(2), 279-314.
- Lee, S. (2007) Effects of textual enhancement and topic familiarity on Korean EFL students' reading comprehension and learning of passive form. *Language Learning* 57(1), 87-118.
- Leaver, B. L. (1997). Content-based instruction in a basic Russian program. In S. Stryker, & B. L. Leaver (Eds.), *Content-based instruction in foreign language education: Models and methods*. (pp. 30-54). Washington, DC: Georgetown University Press.
- Leeman, J., Arteagoitia, I., Fridman, B., & Doughty, C. (1995). Integrating attention to form within meaning: Focus on form in content-based Spanish instruction. In R. Schmidt (Ed.), *Attention and awareness in foreign language learning and teaching*. (pp. 215-258). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center,

- Leow, R. P. (1997) Attention, awareness and foreign language behavior. *Language Learning*, 47, 467-505.
- Leow, R.P. (2001). Do learners notice enhanced forms while interacting with the L2 Input? An online and offline study of the role of written input enhancement in L2 reading. *Hispania* 84, 496-509.
- Leow, R.P., Egi, T., Nuevo, A.M & Tsai, Y. (2003). The roles of textual enhancement and type of linguistic item in adult L2 learners' comprehension and intake. *Applied Language Learning*, 13, 93-108.
- Littlewood, W. (1981). *Communicative language teaching: An introduction*. Cambridge, England: Cambridge University Press.
- Lightbown, P. M., & Spada, N. (2006). *How languages are learned* (3rd edition). Oxford: Oxford University Press.
- Long, M. H. (1985). Input and second language acquisition theory. In S. Gass, & C. Madden (Eds.), *Input and second language acquisition* (pp. 377-393). Rowley, MA: Newbury House.
- Long, M. H. (1991). Focus on form: A design feature in language teaching methodology. In K. de Bot, R.Ginsberg, & C. Kramsch (Eds.), *Foreign Language Research in Cross-cultural Perspective*. (pp. 39-52). Amsterdam, The Netherlands: John Benjamin.
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition*. (pp. 413-468). San Diego, CA: Academic Press, Inc.
- Long, M. (2007). *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum.
- Long, M., Inagaki, S., & Ortega, L. (1998). The role of implicit negative feedback in SLA: Models and recasts in Japanese and Spanish. *Modern Language Journal*, 82(3), 357-371.
- Loschky, L., & Bley-Vroman, R. (1993) Grammar and task-based methodology. In G. E. Crookes & S. M. E. Gass. (Eds.), *Tasks and language learning: Integrating theory and practice* (pp. 123-167). Clevedon, Avon, England: Multilingual Matters.
- Lyster, R. (1998). Recasts, repetition, and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition*, 20, 51-81.
- Lyster, R. (2002). Negotiation in immersion teacher-student interaction. *International Journal of Educational Research*, 37, 237-253.
- Lyster, R. (2004). Research on form-focused instruction in immersion classrooms: Implications for theory and practice. *Journal of French Language Studies*, 14, 321-341.

- Lyster, R. (2007). *Learning and teaching languages through content: A counter-balanced approach*. Amsterdam, The Netherlands: John Benjamins
- Lyster, R., & Izquierdo, J. (2009). Prompts versus recasts in dyadic interaction. *Language Learning* 59(2), 453-498.
- Lyster, R., & Mori, H. (2006). Interactional feedback and instructional counterbalance. *Studies in Second Language Acquisition*, 28, 269-300.
- Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 20, 37-66.
- Mackey, A. (2006). Feedback, noticing and instructed second language learning. *Applied Linguistics*, 27(3), 405-430.
- Mackey, A. (2007). The role of conversational interaction in second language acquisition. In A. Mackey (Ed.), *Conversational interaction in second language acquisition: A collection of empirical studies* (pp. 1-26). Oxford, England : Oxford University Press.
- Mackey, A., & Gass. S. M. (2005). *Second language research: Methodology and design*. Mahwah, NJ: Lawrence Erlbaum.
- Mackey, A., & Goo, J. (2007). Interaction research in SLA: A meta-analysis and research synthesis. In A. Mackey (Ed.), *Conversational interaction in second language acquisition: A collection of empirical studies* (pp. 407-452). Oxford, England: Oxford University Press.
- Mackey, A., McDonough, K., Fujii, A. and Tatsumi, T. (2001) Investigating learners' reports about the L2 classroom. *IRAL* 39, 285-308.
- Mackey, A., & Philp, J. (1998). Conversational interaction and second language development: Recasts, responses, and red herrings? *Modern Language Journal*, 82(3), 338-356.
- Marsh, D., Maljers, A., & Hartiala, A. K. (2001), *Profiling European CLIL classrooms: Languages open doors*. Jyväskylä, Finland: University of Jyväskylä.
- Marsh, D. (2002). The relevance and potential of content and language integrated learning (CLIL) for achieving MT+2 in Europe from *Report: Content and Language Integrated Learning: The European Dimension – Actions, Trends and Foresight Potential*, submitted to the European Commission DG EAC.
- McLaughlin, B. (1990). Restructuring. *Applied Linguistics*, 11, 113-128.
- Miller, P. C. (2003). The effectiveness of corrective feedback: A meta-analysis. (Doctoral dissertation, Purdue University). *Dissertation Abstracts International*, 64(10), 3610.
- Mohan, B. A. (1986). *Language and Content*. Reading, MA: Addison-Wesley.

- Musumeci, D. (1996). Teacher-learner negotiation in content-based instruction: Communication at cross-purposes? *Applied Linguistics*, 17, 286-325.
- Nabei, T., & Swain, M. (2002). Learner awareness of recasts in classroom interaction: A case study of an adult EFL student's second language learning. *Language Awareness*, 11(1), 43-63.
- Nassaji, H. (2009). Effects of recasts and elicitations in dyadic interaction and the role of feedback explicitness. *Language Learning*, 59(2), 411- 452.
- Nicholas, H., Lightbown, P. M., & Spada, N. (2001). Recasts as feedback to language learners. *Language Learning*, 51(4), 719-758.
- Nobuyoshi, J., & Ellis, R. (1993). Focused communication tasks and second language acquisition. *ELT Journal*, 47, 113-128.
- Norris, J. M., & Ortega, L. (2000). Effectiveness of L2 instruction: A research synthesis and quantitative meta-analysis. *Language Learning*, 50, 417-528.
- Nunan, D. (2004). *Task-based language teaching*. Cambridge, England: Cambridge University Press.
- Oller, J. W. Jr. (1973). Cloze tests of second language proficiency and what they measure. *Language Learning*, 23(1), 105-118.
- Oller, J. W. Jr., & Inal, N. (1971). A cloze test of English prepositions. *TESOL Quarterly*, 5(4), 315-326.
- Palmeira, W. K. (1995). A study of uptake by learners of Hawaiian. In R.W. Schmidt (Ed.), *Attention and awareness in foreign language learning*. (pp. 127-161). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Panova, I., & Lyster, R. (2002). Patterns of feedback and uptake in an adult ESL classroom. *TESOL Quarterly*, 36, 573-595.
- Paribakht, T. & Raymond, P. (1992). The implementation of the comprehension-based approach: The University of Ottawa experience. In R. J. Courchène, J. I. Glidden, J. St. John, C. Therien (Eds.), *Comprehension-based second language teaching* (pp. 281-298). Ottawa, Canada: University of Ottawa.
- Pawlikowska-Smith, G. (2000). *Canadian Language Benchmarks 2000: English as second language-for adults*. Ottawa, Canada: Centre for Canadian Language Benchmarks.
- Pica, T. (2002). Subject-matter content: How does it assist the interactional and linguistic needs of classroom language learners? *Modern Language Journal*, 86(1), 1-19.

- Poupore, G. (2005). Quality interaction and types of negotiation in problem-solving and jigsaw tasks. In Edwards, C. & Willis, J. (Eds.), *Teachers exploring tasks in English language teaching* (pp. 242-255). New York, NY: Palgrave Macmillan
- Prabhu, N. S. (1987). *Second language pedagogy*. Oxford, England: Oxford University Press.
- Purpura, J. E. (2004). *Assessing grammar*. New York, NY: Cambridge University Press.
- Qin, J. (2008). The effect of processing instruction and dictogloss tasks on acquisition of the English passive voice. *Language Teaching Research*, 12(1), 61-82.
- Radwan, A. A. (2005). The effectiveness of explicit attention to form in language learning. *System*, 33, 69-87.
- Ready, D., & Wesche, M. (1992). An evaluation of the University of Ottawa's sheltered program: Language teaching strategies that work. In R. J. Courchêne, J. I. Glidden, J. St. John, & C. Therien (Eds.), *Comprehension-based second language teaching*. (pp. 389-404). Ottawa, Ontario: University of Ottawa Press.
- Robinson, P. (1995). Review article: Attention, memory and the 'noticing' hypothesis. *Language Learning*, 45, 283-331.
- Robinson, P. (2003). The cognition hypothesis, task design, and adult task-based language learning. *Second Language Studies*, 21(2), 45-105.
- Rodgers, D. M. (2006). Developing content and form: Encouraging evidence from Italian content-based instruction. *The Modern Language Journal*, 90, 373-386.
- Rosa, E. M., & Leow, R. P. (2004). Awareness, different learning conditions, and second language development. *Applied Psycholinguistics*, 25, 269-292.
- Rosa, E., M., & O'Neill, M. (1999). Explicitness, intake, and the issue of awareness: Another piece to the puzzle. *Studies in Second Language Acquisition*, 21, 511-556.
- Russell, V. J., & Spada, N. (2006). The effectiveness of corrective feedback for second language acquisition: A meta-analysis of the research. In J. Norris & L. Ortega (Eds.), *Synthesizing research on language learning and teaching*. (pp. 133-164). Amsterdam, The Netherlands: John Benjamins.
- Salaberry, M. R. (1998). The development of aspectual distinctions in L2 French classroom Learning. *Canadian Modern Language Review*, 54(4), 508-542.
- Samuda, V. (2001). Getting relationship between form and meaning during task performance: The role of the teacher. In M. Bygate, P. Skehan, & M. Swain (Eds.), *Task-based learning: Language teaching, learning and assessment* (pp. 119-140). Harlow, England: Pearson.

- Savignon, S. J. (1983). Communicative language teaching: State of the art. *TESOL Quarterly*, 25(2), 261-361.
- Savignon, S. J. (2005). Communicative language teaching: strategies and goals. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 653-670). Mahway, NJ: Lawrence Erlbaum.
- Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-158.
- Schmidt, R. W. (1995). Consciousness and foreign language learning: A tutorial on the role of attention and awareness. In R.W. Schmidt (Ed.), *Attention and Awareness in Foreign Language Learning* (pp.1- 63). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: a case study of an adult learner of Portuguese. In R. R. Day (Ed.), *Talking to learn: Conversation in second language acquisition* (pp. 237-322). Rowley, MA: Newbury House.
- Scott, V. M. (1990). Explicit and implicit grammar teaching strategies: New empirical data. *The French Review*, 63, 779-789.
- Sharwood Smith, M. (1981). Consciousness-raising and second language acquisition. *Applied Linguistics*, 2(2), 159-168.
- Sharwood Smith, M., (1993). Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition*, 15, 165-179.
- Sheen, Y. (2004). Corrective feedback and learner uptake in communicative classrooms across instructional settings. *Language Teaching Research* 8(3), 263-300.
- Sheen, Y. (2007). The effects of corrective feedback, language aptitude, and learner attitudes on the acquisition of English articles. In A. Mackey (Ed.), *Conversational interaction in SLA* (pp. 301-322). Oxford, England: Oxford University Press.
- Skehan, P. (1996). Second language acquisition research and task-based instruction. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 17-30). Oxford, England: Heinemann.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford, England: Oxford University Press.
- Skehan, P. & Foster, P. (2001). Cognition and tasks. In Robinson, P. (Ed.), *Cognition and second language instruction*. (pp. 183-205). Cambridge, England: Cambridge University Press.

- Slimani, A. (1989). The role of topicalization in classroom language learning. *System*, 17(2), 223-234.
- Slimani, A. (1992). Evaluation of classroom interaction. In C. Alderson & A. Beretta. (Eds.), *Evaluating second language education* (pp. 197-122). Cambridge, England: Cambridge University Press.
- Smit, U. (2008). Research in progress. The AILA research network: CLIL and immersion classrooms: Applied linguistics perspectives. *Language Teaching*, 41(2), 295-298.
- Snow, M. A., & Brinton, D. M. (1997). *The content-based classroom: perspectives on integrating language and content*. White Plains, NY: Addison Wesley Longman.
- Snow, M. A., Met, M., & Genesee, F. (1989). A conceptual framework for the integration of language and content-based language instruction. *TESOL Quarterly*, 23(2), 201-217.
- Spada, N. (1997). Form-focused instruction and second language acquisition: A review of classroom and laboratory research. *Language Teaching*, 29, 73-87.
- Spada, N. (2007). Communicative language teaching: Current status and future prospects. In J. Cummins, & C. Davison (Eds.), *Kluwer handbook of English language teaching* (pp. 271-288). Amsterdam, The Netherlands: Kluwer Publications.
- Spada, N., & Lightbrown, P. M. (1993). Instruction and the development of questions in L2 classrooms. *Studies in Second Language Acquisition*, 15(2), 205-224.
- Spada, N., & Lightbown, P. M. (2008). Form-focused instruction: Isolated or integrated? *TESOL Quarterly: A Journal for Teachers of English to Speakers of Other Languages and of Standard English as a Second Dialect*, 42(2), 181-207.
- Spada, N., & Lightbown, P. M. (2009). Interaction research in second/foreign language classrooms. In C. Polio & A. Mackey (Eds.), *Multiple perspectives on interaction* (pp. 157-175). New York, NY: Taylor and Francis.
- Spada, N., & Tomita, Y. (2010). Interactions between type of instruction and type of language feature: A meta-analysis. *Language Learning*, 60(2), 263-308
- Stern, H. H. (1990). Analysis and experience as variables in second language pedagogy. In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds.), *The development of second language proficiency* (pp 93-109). New York, NY: Cambridge University Press.
- Stoller, F. L. (2004). Content-based instruction: Perspectives on curriculum planning. *Annual Review of Applied Linguistics*, 24, 261-283.
- Straight, H. S. (1997). Language -based content instruction. In S. B. Stryker & B. L. Leaver (Eds.), *Content-based instruction in foreign language: Models and methods*. (pp. 236-259). Washington, DC: Georgetown University Press.

- Stryker, S. B., & Leaver, B. L. (1997). (Eds.), *Content-based instruction in foreign language: Models and methods*. Washington, DC: Georgetown University Press.
- Swain, M. (1985). Communicative competence: some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Rowley, MA: Newbury House.
- Swain, M. (1988). Manipulating and complementing content teaching to maximize second language learning. *TESL Canada Journal*, 6(1), 68-83.
- Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (Eds.), *Principle and practice in applied linguistics: Studies in honour of H.G. Widdowson*. (pp. 125-144). Oxford, England: Oxford University Press.
- Swain, M. (1996). Integrating language and content in immersion classrooms: Research perspectives. *Canadian Modern Language Review*, 52(4), 529-548.
- Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty, & J. Williams (Eds.), *Focus on form in classroom second language acquisition*. (pp. 64-82). New York, NY: Cambridge University Press.
- Swain, M. (2000). French immersion research in Canada: Recent contributions to SLA and applied linguistics. *Annual Review of Applied Linguistics*, 20, 199-212.
- Swain, M. (2001). Integrating language and content teaching through collaborative tasks. *Canadian Modern Language Review*, 58(1), 44-63.
- Swain, M., & Johnson, R. K. (1997). Immersion education: A category within bilingual education. In R. K. Johnson & M. Swain (Eds.), *Immersion education: international perspectives* (pp. 1-16). Cambridge, England: Cambridge University Press.
- Swain, M., & Lapkin, S. (1981). *Bilingual education in Ontario: A decade of research*. Toronto, Canada: The Minister of Education, Ontario.
- Swain, M., & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics*, 16(3), 371-391.
- Swain, M., & Lapkin, S. (2001). Focus on form through collaborative dialogue: Exploring task effects. In M. Bygate, P. Skehan, & M. Swain (Eds.), *Researching pedagogic tasks: Second language learning, teaching and testing*. (pp. 99-118). Harlow, England: Pearson Education.
- Tobias, S. (1994). Interest, prior knowledge and learning. *Review of Educational Research*, 64(1), 37-54.
- Tomlin, R. S., & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16, 183-203.

- Toth, P. D. (2004). When grammar instruction undermines cohesion in L2 Spanish classroom discourse. *The Modern Language Journal*, 88(1), 14-30.
- Trahey, M., & White, L., (1993). Positive evidence and preemption in the second language classroom. *Studies in Second Language Acquisition*, 15, 181-204.
- Truscott, J. (1998). Noticing in second language acquisition: A critical review. *Second Language Research*, 14, 103-135.
- Turnbull, M., Lapkin, S., & Hart, D. (2001). Grade 3 immersion students' performance in literacy and mathematics: Province-wide results from Ontario (1998-99). *Canadian Modern Language Review*, 58(1), 9-26.
- Van de Craen, P., Mondt, K., Allain, L., & Gao, Y. (2007). Why and how CLIL works: An outline for a CLIL theory. *Vienna English Working Papers*, 16(3), 70-78.
- VanPatten, B. (1990). Attending to form and content in the input. *Studies in Second Language Acquisition*, 12, 287-301.
- VanPatten, B. (1996). *Input processing and grammar instruction in second language acquisition*. Norwood, NJ: Ablex.
- VanPatten, B. (2000). Processing instruction as form-meaning connections: Issues in theory and research. In J. F. Lee & A. Valdman (Eds.), *Form and meaning: Multiple perspectives* (pp. 43-68). Boston, MA: Heinle & Heinle.
- Wesche, M. B., & Skehan, P. (2002). Communicative, task-based, and content-based language instruction. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (pp. 207-228). New York, NY: Oxford University Press.
- White, J. (1998). Getting the learners' attention: A typographical input enhancement study. In C. Doughty, & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 85-113). New York, NY: Cambridge University Press.
- White, J., & Ranta, L. (2002). Examining the interface between metalinguistic task performance and oral production in a second language. *Language Awareness*, 11, 259-290.
- White, J., Spada, N., Lightbown, P., & Ranta, L. (1991). Input enhancement and L2 question formation. *Applied Linguistics*, 12(4), 416-432.
- Williams, J. (2005). Form-focused instruction. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 671-692). Mahwah, NJ: Lawrence Erlbaum.
- Williams, J., & Evans, J. (1998). What kind of focus and on which forms? In C. Doughty, & J. Williams (Eds.), *Focus on form in classroom second language acquisition* (pp. 139-155). New York, NY: Cambridge University Press.

- Wong, W. (2003). Textual enhancement and simplified input: Effects on L2 comprehension and acquisition of non-meaningful grammatical form. *Applied Language Learning, 13*, 17-45.
- Wong, K. (1997). VESL and content-based instruction: What do they have in common? In M. A. Snow & D. M. Brinton. (Eds.), *The content-based classroom: Perspectives on integrating language and content* (pp. 359-366). White Plains, NY: Addison Wesley Longman.
- Zyzik, E., & Polio, C. (2008). Incidental focus on form in university Spanish literature courses. *The Modern Language Journal, 92*(i), 53-70.