

An Examination of Reading-Writing Integration: Perspectives, Practices, and Literacy Development

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This study proposed the conceptual model that could explain the way in which students' perspectives on reading-writing integration affected their literacy development through the practices of reading connected to writing. To do this, it developed a set of hypotheses, drawn from the theory of reading-writing connection and the literature, to test the empirical relationships among students' integrated perspectives, reading-writing practices, and literacy development. Factor analysis and structural equation modeling techniques were used to analyze survey data collected from the students. The test results show that the patterns of engaging in reading in connection to writing, serving as a mediating channel, helped to explain how integrated perspectives affected the different stages of reading and writing developments. In particular, students with low integrated perspectives tended to engage in reading (or writing) intensive practices, thus experiencing literacy development skewed to reading (or writing). On the contrary, students with high integrated views more practiced reading in connection to writing and experienced learning growth in both areas. This study suggests that the range of teaching practices should be coordinated in the way it helps students shape their perspectives of reading and writing on a more integrative continuum.

[perspectives on reading-writing integration/reading-writing practices/literacy development/읽기-쓰기 통합인식/읽기-쓰기 행태/읽기-쓰기 능력향상]

I. INTRODUCTION

For decades, reading and writing in EFL classrooms were taught separately and as technical skills in that they were viewed as language sub-skills that could be taught one by

one until the learners mastered all of the component skills. Recent research in English as a Foreign Language (EFL), recognizing the interdependence of reading and writing, has called into question this traditional, narrow view of the role of reading in the writing (Grabe, 2002; Hirvela, 2001, 2005; Leki & Carson, 1997; Nelson & Carson, 1998; Ruddle, 2005; Minjong Song, 2007). One of the most consistent instructional implications of two decades of research on the L2 reading-writing connections is that both disciplines should be taught together and that the integration of reading and writing holds the greatest potential for enhancing learning in all language areas (Ackerman, 1989; Grabe, 2002; Lightbown, Halter, White & Horst, 2002; Prowse, 2003).

Despite a strong assertion that integrated reading-writing instruction has the potential for enhancing both reading and writing development, the research in L2 teaching practices little reveals about why the learning of reading and writing is often skewed toward only some students or toward one literacy process relative to the other (Bosher & Rowecamp, 1998; Carrell & Connor, 1991; Esmaeili, 2002; Flahive & Bailey, 1993; Hirvela, 2001). The answer to this question is recognized by the 'cognitive and social perspective of the reading-writing connections,'(hereafter RWC theory) that emphasizes the link between students' perceptions on reading and writing and their practices (Flower, 1994; Grabe, 2002; Nelson & Carson, 1998). The RWC theory views students' practices as an interaction of a cognitive dimension of literacy and socio-cultural knowledge through the process into social practice of the classroom culture (Flower, 1994; Flower, Long & Higgins, 2002).

This theoretical aspect can help to explain how students' perceptions on reading-writing connections shape their ways of connecting reading and writing practices through which they produce various types of intermediate texts. In this paper, intermediate texts are defined as types of support texts students often produce while engaging in reading and writing practices, such as "*reading summary notes*," "*annotated texts*," "*writing outlines*," and "*types of written notes*." Since such intermediate texts can explain the way reading and writing are connected to each other during the literacy practices, these texts are expected to play a mediating role in acquiring the balanced development of reading and writing skills. For example, students possessing more integrative views on reading and writing are likely to practice reading in connection to writing and thus to experience literacy development in both areas. Throughout this paper, the term "literacy development" is narrowly defined as reading-writing development that denotes the balanced growth of reading and writing skills.

As a RWC theory predicts, if a learner's perspective is closely linked to his/her reading-writing practices, it could be used as a construct to explain the specific way reading and writing are connected to each other in the context of an English classroom. Although many studies addressed the theoretical link between perspectives and practices (Bosher, 1998;

Connor, 1996; Rinnert & Kobayashi, 2001; Tsang, 1997), there has been little research to test such a connection empirically. Specifically these studies suggest that we as practitioners need to know how students perceive the integration of reading and writing to understand their practices of connecting reading to writing during the learning processes. In addition, less attention has been paid to the mediating role of intermediate texts in both the theoretical and empirical grounds though a few studies showed that students' perspectives are linked to their practices through the interaction with intermediate texts (Sun-Young Kim, 2006; Shanahan, 1997). This study proposes the conceptual model that can explain the way in which the perspectives on reading-writing integrations affect literacy development through the reading practices connected to writing. To test the empirical relationships among integrative views, reading-writing practices, intermediate texts, and literacy development, this paper developed a set of hypotheses, drawn from the RWC theory and the literature. Factor analysis and structural equation modeling techniques were used to analyze survey data collected from the students.

II. LITERATURE REVIEW

This section reviews the existing research on reading-writing connection, which formed the theoretical framework for this study. Then, a set of hypotheses drawn on the literature were developed.

1. RWC Theory: Integrative Perspective and Literacy Practices

The theoretical aspect of RWC establishes the link between integrative perceptions and literacy practices by viewing reading-writing connection as an interaction of the cognitive and social process (Flower, 1994; Flower, Long & Higgins, 2002). In understanding the context of the 'perspectives on reading-writing integration' in society, Smith's (1987) metaphor of 'a literacy club' suggests the existence of shared discourse features as a social context where reading and writing interact. To become a member of discourse communities, individuals participate in the particular literacy of that community (Grabe, 2002; Johns, 2002; Martin, 2002; Spack, 1998). Learners bring values, attitudes, and behaviors of their home cultures and subcultures, which shape and reshape students' perceptions on integrating reading and writing (Gee, 1998; Flower, Long & Higgins, 2002). As Flower (1994) argues, some of the cultural and institutional factors powerfully shape students' views on reading and writing, thus influencing their ways of connecting reading to writing during the practices.

This complexity of the social contexts of reading-writing connection is illustrated by

Ackerman (1989) that examined social influence (i.e., schooling, values, attitudes, and behaviors of their home cultures, linguistic practices in communities, and a student's own intellectual history) on literacy practices. These factors make up the social dimensions of reading and writing, shaping the learners' perceptions on reading and writing and thus engaging in reading and writing practices. As noted by Horowitz (1986), L2 learners' perspectives, understood as personal convictions reflecting individual and social truths to which people adhere in daily living, influence literacy practices in a new discourse community.

A key element, drawn on this theoretical orientation, is the concept of integrative perspectives on reading and writing, which influences students' approaches to literacy practices (Horowitz, 1986). Kyu-Hwa Kim (2007) also shows that integrative teaching approach has a positive effect on students' attitude on literacy practices. From this perspective, the learners' perspectives on reading-writing connections are shaped and reshaped through their literacy experiences, comprising the individual and social dimensions of reading-writing practices. Literacy experiences of the L2 learners under the different traditions of the discourse communities and social and cultural history within and beyond schools contribute to shape their perspectives on reading-writing relationships that condition the individual reading-writing practices (Flower, Long & Higgins, 2002). However, accessing the learners' perceptions on reading-writing integration does not necessarily help teaching practices unless a strong link between their perceptions and reading-writing practices is established. Silva (1993) investigated ESL graduate students' perceptions on writing in their L1 and L2 and found that they tended to bring some fairly strongly held and well developed ideas about writing to the classroom with them. And such perceptions influenced their ways of practicing writing. Similarly, using interview data, Leki and Carson (1997) examined how L2 students viewed the role of reading in writing under each of the three conditions (i.e., writing without a reading text, writing with a reading text as springboard only, and writing with responsibility for source text content). They found that ways of connecting reading in their writing differed widely across students according to how they viewed the role of using texts in writing.

On the other hand, Sun-Young Kim (2006) showed that perspectives on reading and writing can be used as a criterion to understand students' practices of connecting reading to writing. Specifically, she documented that students possessing less integrative perspectives tended to consistently engage in reading practices not connected to writing ones. These students, for example, engaged in either writing intensive practices or reading intensive practices over the course of assignment, providing evidence supporting a close link between perspectives and reading-writing practices. The present study, which uses L2 learners' perspectives on integrating reading and writing as a key construct to condition the dimension of literacy practices, examines the role of perspectives in explaining practices of

combining reading and writing during the learning processes.

2. Reading-Writing Practices and Literacy Development

The schema-theoretic based studies of reading comprehension in the late 1970s and the process-oriented approaches to writing research in the early 1980s have led to the notion that reading and writing processes are closely related: a number of common processes shared by both disciplines. This view of reading-writing developments as shared knowledge and process suggests that what we know about reading is similar to what we know about writing. That is, the way we comprehend texts is similar to the way we compose texts (Carson & Longhini, 2002). From such a shared knowledge and process perspective, most of the research employed a correlational design to examine the interdependence of reading-writing development among the learners (Belanger, 1987; Shanahan, 1997; Stotsky, 1983; Tierney & Shanahan, 1991). Earlier work by Stotsky (1983) and Belanger (1987), in their correlational studies, confirmed that better writers tended to be better readers by showing the strong correlations between reading abilities and writing abilities. Their results suggest that shared knowledge is available to readers and writers in both domains. In other words, knowledge contributing to making someone a good reader may also be contributing to making that person a good writer as well.

However, a series of studies on reading-writing relationships (Shanahan, 1997; Tierney & Shanahan, 1991) generally showed that reading and writing abilities correlate between 0.50 and 0.70, illustrating moderate overlapping in abilities (i.e., 25% to 50% of variability in the data explained by the relationship between reading and writing abilities). The works by Beck (1998) and Newell (1990) showed that there was little direct evidence that reading and writing together led to enhanced learning. As Tierney and Shanahan (1991) pointed out that writing did not always result in improved reading, nor did reading always result in improved writing. This result reveals the possibilities that literacy development can be skewed to one literacy skill.

In L2 literacy contexts, the research examining the important aspects of the commonalities between L2 reading and writing abilities has proven to be relatively poor as compared with L1-based research partly because of the very existence of the wide range of individual differences (Bosher, 1998; Carrell & Connor, 1991; Flahive & Bailey, 1993). Similarly, Flahive and Bailey (1993) found an insignificant correlation between L2 reading and writing abilities. Specifically, the amount of reading was not correlated with writing proficiency, which was measured by an argument style placement essay. They showed good L2 readers were not necessarily good L2 writers by finding an evidence against the shared knowledge and process (i.e., the variability in L2 reading and writing abilities). Their study suggests that we may not explain the asymmetries in reading-writing ability

without understanding the literacy practices of L2 learners.

Carrell and Connor (1991) and Esmaili (2002) suggest that such asymmetries in reading and writing development are attributed to students' ways of practicing reading and writing activities. As Carrell and Connor addressed, an examination of the patterns of engaging in reading-writing practices can help to explain why some students experience literacy development skewed to one linguistic area. Specifically, they showed that students' ways of integrating reading and writing practices were able to explain the variability in L2 reading and writing development. They found that there was a significant relationship between literacy practices and reading-writing development, generally suggesting the positive relationship between literacy practices and literacy development. These findings imply that students need to engage in reading in connection to writing to ensure the balanced growth in both reading and writing.

3. Reading-Writing Practices and Intermediate Texts

The empirical relationships among reading-writing practices, intermediate texts, and literacy development are expected to be positive. However, the link between literacy practices and development is likely to be mediated by intermediate texts produced by students during the reading-writing processes. Such written intermediate texts often function as a vehicle for reshaping information during the reading or writing processes, helping to enhance literacy development. Sun-Young Kim (2006) illustrates this point by showing that asymmetries in reading and writing development were wider for the group of students who did not produce types of intermediate texts while engaging in reading and writing practices. Specifically, under the "writing intensive pattern," students worked mainly on composing their own texts without support from other types of reading and writing practices and produced less intermediate texts.

Similarly, Torrance, Thomas and Robinson (2000) and Many, Fyfe, Lewis and Mitchell (1996) address the important role of intermediate texts in reading-writing practices by examining the pattern of literacy practices. The writing or reading intensive pattern by Sun-Young Kim (2006) shares a similar idea with the pattern of "read/remember/write" (Many, Fyfe, Lewis & Mitchell, 1996) and "think-then-do" (Torrance, Thomas & Robinson, 2000) in that the range of intermediate texts produced by less able learners is limited. On the other hand, these studies indicated that a group of students who experience balanced literacy development in both linguistic areas produced a wide range of written intermediate texts (i.e., writing reading summary, making types of notes, or doing annotated reading) while engaging in reading in connection to writing.

Sun-Young Kim (2010) in her study showed how the integrated pattern of reading-writing practices, characterized as a sequence of "reading-intermediate texts-writing"

produced written intermediate texts through reading practices occurring in connection to other writing practices during the processes. Importantly, students used those written intermediate texts by reading them during the literacy practices. In this way, the students' reading and writing practices often occurred in association with other intermediate support texts (Kennedy, 1985; Martin, 2002; Rinnert & Kobayashi, 2001; Wolfe, 2000). For example, some students, while reading the source texts, often paraphrase sentences or make specific notes in the margins that can be used as resources. This clearly illustrates how the interaction of reading-writing practices and types of intermediate texts can occur during the literacy processes, suggesting the positive relationships that exist among them.

III. METHODS

1. Hypothesis Development

The relationships among the RWC variables, intermediate texts, and literacy development have not been widely explored in the field of English education. Furthermore, the mediating role played by intermediate texts has not been examined in the literature on reading-writing connections. To empirically examine the role of perspectives on integrating reading and writing in literacy practices and literacy development, the researcher developed the conceptual model drawn both from the RWC theory and the literature. Specifically, the empirical model tested how students' integrative views affected reading-writing practices and literacy development through the interaction with intermediate texts they produced. To understand such a mechanism, three hypotheses were proposed. The empirical model explaining the interrelations among the factors is presented in Figure 1 with the corresponding correlation coefficients (r). The Pearson product-moment correlation coefficient is used as a measure of the correlation among each category in the survey to see the possible relationships in the stage of hypothesis development.

In Hypothesis 1, it was expected that students' perceptions on reading-writing integration positively influenced their literacy development. Although such a relationship was not directly documented in the literature, it was inferred that students' integrative perspectives played an important role in determining the extent to which they experienced literacy development through an active engagement in reading-writing practices. In the model, two variables, integrative view and literacy development, were correlated each other with a correlation coefficient of 0.42, supporting the possible relationship existing between them.

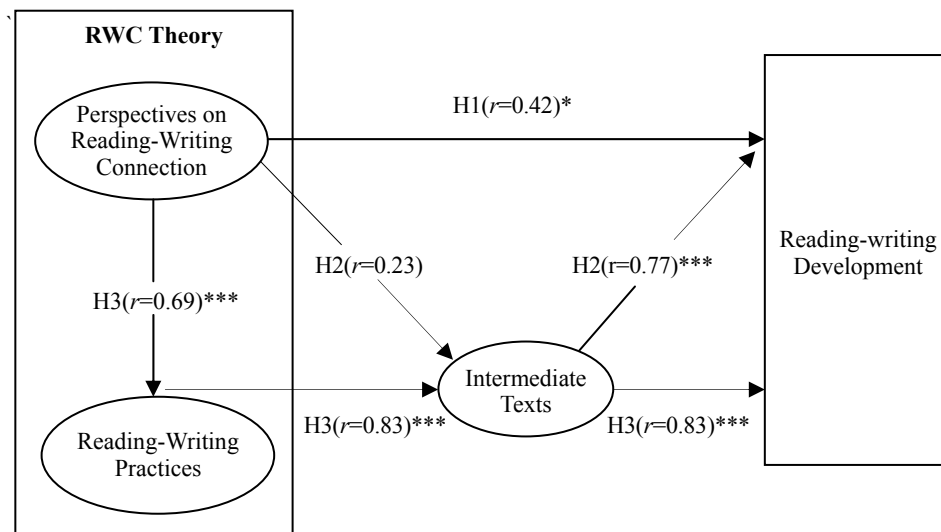


Figure 1. Conceptual mapping of the interrelationships among the factors.

Note: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. The degree of relationship among the variables included in the model was estimated using the Pearson r (product-moment) correlation method.

In Hypothesis 2, it was expected that students' perceptions on reading-writing integration had a significant and positive effect on literacy development through an engagement in reading practices in connection to writing. As RWC theory predicted, students' perceptions on reading and writing was likely to shape their ways of incorporating reading in their writings. As expected, the perception measure was highly correlated with a measure of reading-writing practices ($r=0.69$), which was also closely related to a measure of literacy development reported by students with a correlation coefficient of 0.70.

Hypothesis 3 could be considered as an extension of Hypothesis 2 in that it examined the role of a mediating factor, or intermediate texts. Since students, while engaging in reading-writing practices, produced various types of support materials, these intermediate texts were likely to be incorporated into their reading-writing processes. As shown in Figure 1, a measure of intermediate texts is highly correlated with a practice variable ($r=0.83$) and also with a measure of literacy development ($r=0.78$).

H1: An integrative view on reading and writing has a significant and positive effect on students' reading-writing development.

H2: An integrative view on reading and writing has a significant and positive effect on students' reading-writing development through the interaction with the intermediate texts.

H3: An integrative view on reading and writing, influencing patterns of practicing reading-writing, has a significant and positive effect on students' reading-writing development through the interaction with the intermediate texts.

2. Survey

This study developed a survey, as shown in the appendix, to measure the students' evaluation about reading-writing connections on a 5-point Likert scale in the four specific areas: two RWC variables (integrative perspective and reading-writing practices), the use of intermediate texts, and literacy development. This self-reporting survey was distributed to Korean college students who took English classes. The three universities were chosen. The survey was administrated by three research assistants who visited English classes in the three universities, or two urban universities and one regional university, during the two month period (September and November, 2010). The sample might not be random since the researcher limited the survey only to the three universities due to the time and budget constraints. However, the size of the survey appears to be sufficient to represent the student population. Among 330 surveys, 285 collected valid observations with complete responses were used in this study. Sample characteristics such as gender, age, and educational experience, are reported in Table 1.

Table 1
Sample Characteristics

	Characteristics	N = 285	%
Gender	Male	116	40.7
	Female	169	59.3
Age	18-22	132	46.3
	23-29	93	32.6
	over 29	60	21.1
Previous education	Secondary (high school)	221	77.5
	College	43	15.1
	University	12	4.2
	Graduate	9	3.2

The participants attending the surveys showed a range of differences in terms of age and educational background. When it comes to gender, the percentage of female students was higher than that of male ones with the corresponding numbers of 59.3%, 40.7%,

respectively. Specifically, the ages for the majority of students were ranged from 18 to 29, but a significant portion of students (21.1%) were also aged over 30. The participants' educational backgrounds differed widely in that more than 20% of students already had undergraduate degrees or experienced graduate training in other universities, as shown in Table 1.

A survey included four items in each category to access students' responses to reading-writing connections in the four categorical areas, as shown in Table 2. The RWC variables (i.e., perspectives on integrating reading and writing and reading-writing practices) were measured on a less-more continuum with responses ranging from "Least likely = 1" to "Most likely = 5." A reading-writing development variable measured the extent to which students recognized the relative stage of reading and writing development. For example, a response of "Least likely = 1" meant students experienced literacy development skewed to one linguistic area, and "Most likely = 5" indicated they evaluated that their reading and writing development was well balanced.

Table 2
Definition and Measures of the Four Variables

Factors	Operational definitions	Literature (items)
1. Perceptions on integrating reading and writing	Measure the extent to which reading and writing are viewed as sameness	Kim (2006, 2010)
2. Reading-writing practices	Measure the degree of engaging in reading in connection to writing.	Hirvela (2000, 2005), Kim (2006)
3. Use of intermediate texts	Measure the extent to which students produce types of intermediate texts while practicing.	Kim (2010)
4. Reading-writing development	Measure the developmental stage of reading relative to writing.	Tierney & Shanahan (1991)

3. Factor Analysis

The factor analysis with a Varimax rotation procedure was applied to identify underlying dimensions of the three independent variables (two RWC variables and intermediate text) with the reliability test that evaluated the internal consistency for extracted constructs. An exploratory factor analysis yield three factors based on one eigenvalue cut-off. The sums of squared loadings from these components showed the cumulative value of 78% in explaining the total variance. Further, scale refinement was accomplished by examining items-to-total correlation to improve the reliability. The results for factor analysis for these variables are summarized in Table 3 below.

As shown in Table 3, 11 out of 12 items were retained for analysis, which represented the three factors: "integrative perspective" measured by four items with internal

consistency of $\alpha = 0.89$, “reading-writing practices” measured by four items with $\alpha = 0.87$, and “use of intermediate text” measured by 3 items with $\alpha = 0.85$. In additions, the Kaiser-Meyer-Olkin (KMO) overall measure of sample adequacy (MSA) yielded 0.92 within the acceptable level. Such reliability measures provided a strong support for using these multiple items. On the other hand, an internal consistency measure for the dependent variable ($\alpha = 0.8$ with 4 items) included that items included in the survey were the reliable measure of literacy development.

Table 3
Results of Factor Analysis for Explanatory Variables

Factor name	Items	Factor loadings	Eigen – value	Extracted variance	Items-total correlation	(α)
Integrative Views	1	0.87	4.31	32.35	0.75	0.89
	2	0.82			0.81	
	3	0.79			0.89	
	4	0.80			0.79	
R-W Practices	1	0.80	3.99	23.50	0.88	0.87
	2	0.77			0.84	
	3	0.83			0.76	
	4	0.70			0.80	
Use of Intermediate Texts	1	0.84	4.01	21.95	0.75	0.85
	2	0.79			0.79	
	3	0.82			0.73	
Total				77.80		

Note: The Principle Component Analysis was used as an extraction method and Varimax with Kaiser Normalization as rotation method.

An empirical testing of the structural model was conducted using the Analysis of Moment Structure (AMOS: Arbuckle, 1996), and the Maximum Likelihood Estimation method was used to estimate numerical values for its components. Bootstrapping (Efron, 1987) was used to correct the presence of distribution problems in the data and to analyze their effects on the parameter estimates, and a total of 220 bootstrap replications were obtained. To test the validity of the scales in measuring specific constructs of the measurement model according to Fornell and Lacker’s (1981) guideline, Confirmatory

Factor Analysis (CFA) was applied.

With regard to an identification problem, the degree of freedom with large standard error variances (Bollen & Joreskog, 1985) was used to diagnose such a problem according to Hayduk's (1987) guidelines. The goodness-of-fit measures were evaluated based on the following measures, such as Chi-square statistic, degree of freedom, and goodness of fit index (GFI). In particular, the GFI value of 0.92, varying from 0 to 1, was considered to be acceptable (Bentler & Bonnett, 1980).

IV. EMPIRICAL RESULTS

The test results for the proposed hypotheses are summarized in Table 4. Hypothesis 1 (i.e., direct impact of an integrative views on reading and writing on literacy development) was rejected on the ground that no causal relationship between two variables was established with the estimated beta coefficient of 0.37 ($p > 0.05$). However, this result did not provide any information about a specific channel through which a student's perception on reading-writing integration affected literacy development, though it was expected to play an important role in explaining reading-writing development. This finding is consistent with the works by both Flower (1994) and Sun-Young Kim (2006) that emphasizes the importance of the mediating channel, thus providing the evidence supporting the role of reading-writing practices students engage in.

With regard to Hypothesis 2, an integrative view had a significant and positive impact on the reading-writing development but through the interaction with the reading-writing practices. Specifically, in Hypothesis 2, an integrative perception affected reading-writing practices with the estimated value of 0.83 ($p < 0.01$), and reading-writing practices were positively interacted with reading-writing development with the estimated value of 0.48 ($p < 0.05$). The result provides the evidence supporting the RWC theory by showing that students' perceptions on reading-writing integration help to shape their practices of engaging in reading and writing, which influences the developmental paths of reading and writing.

Hypothesis 3 tested whether the intermediate texts produced by students could serve as the mediating factor. This hypothesis was accepted, supporting that the use of intermediate texts had a significant interaction with reading-writing practices with the estimated value of 0.63 ($p < 0.05$) and also interacted with literacy development (estimated coefficient of 0.67 with $p < 0.05$).

In short, the test results show that students' perspectives on integrating reading and writing shaped the specific ways in which they engaged in reading practices in connection to writing, providing empirical evidence supporting the RWC theory. However, the

rejection of Hypothesis 1 indicates that an integrative perception itself did not lead to literacy development, implying the important role of reading-writing practices in literacy development.

Table 4
Outputs of Structural Equation Model (SEM) Estimates

	Path diagram		Test	Proposed model	Bootstrapping #
				Estimate (S.E.)	Estimate (bias)
H1:	Perception on R-W integration	→ R-W development	Reject	0.37 (0.267)	0.42 (0.041)
H2:	Perception on R-W integration	→ R - W practices	Accept	0.83 (0.033)***	0.85 (0.003)
	R-W practices	→ R - W development		0.48 (0.107)**	0.50 (0.019)
H3:	Perception on R-W integration	→ R - W practices	Accept	0.81 (0.069)***	0.78 (0.017)
	R-W practices	→ Intermediate texts		0.63 (0.084)**	0.61 (0.023)
	Intermediate texts	→ R - W development		0.67 (0.073)**	0.59 (0.028)

Note: * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Fitness measures for respective tests are as follows: Chi-square = 199.33, RMR = 0.049, RMSEA = 0.080, and GFI = 0.92.

Hypotheses 2 and 3 both establish the empirical relationship between literacy practices and literacy development. In particular, Hypothesis 3 emphasizes the important role played by intermediate texts, which works as a mediating channel between the practice and development variables.

V. DISCUSSION AND IMPLICATIONS

This study empirically tests the relationships among the variables drawn from the RWC theory and the literature. The results of this study help to understand the way reading is connected to writing by addressing the importance of students' perspectives on reading-writing integration. Specifically, the empirical results show that students possessing more integrative perspectives are likely to engage in reading in connection to writing and thus help to explain why some students experience literacy development skewed to reading or writing. The present study argues that students' perspectives matter in understanding patterns of reading-writing practices involved in the learning process. They, having various

literacy experiences from different learning traditions, provide the unique data unattainable from any objective measurements (Hirvela, 2001; Kamhi-Stein, 2003). In this respect, the survey results provide some pedagogical implications applicable to English classes.

First, the link between students' perspectives and their literacy practices highlights important aspects of modeling an instruction applicable to all ranges of perspective groups. As suggested by the hypothesis tests, students' perspectives are closely related to their reading-writing practices. This finding strongly suggests that teachers need to create an instructional environment conducive to changing perspectives about literacy integration. The rich environment should have the students in the low perspective category negotiate different approaches to reading-writing through classroom interaction with those in the high perspective category. Teachers, for instance, may use a classroom as a social place to negotiate differences in perspective through interaction with other students (i.e., pair work, reading discussion class, or peer revision class). This illustrates how an instructional model can lead to the potential for further growth toward integration by all the perspective groups.

Second, classroom teachers need to design the tasks in the way they produce various types of written intermediate texts. As the result suggests, a student's ability to create and to use intermediate texts can be served as a means to develop their reading-writing skills. By engaging in reading practices in connection to writing ones, students are able to produce their own texts, which can be incorporated into their literacy development.

Further research is needed to confirm the validity of the model. A complete understanding of the link between the perspectives and the patterns of reading-writing practices requires an examination of the patterns of practices in relation to the perspectives over an extended period of time. A single administration of the survey may not provide enough information about whether students' perspectives are shaped and reshaped over the course of literacy practices. In this respect, the changing characteristics of the integrative perspective can be conducted in future research. As an aside, it is important to acknowledge possible biases related to ceiling and floor effects as one of the limitations of this study. Both ceiling and floor effects are related to the survey measurement scale (a 5-point Likert scale) used in this study.

Another limitation is related to the establishment of construct validity, which can be checked through various ways such as the literature, theoretical ground, and professionals. However, this study tested the validity of survey items associated with literacy development based only on the literature, which were broadly defined as both the measures of process and ability. This may cause the respondents to fail to distinguish between reading-writing integration and literacy development during the survey. For this reason, the result of the study cannot be taken as conclusive evidence supporting the proposed relationships across the various learning contexts. From this study, it is clear that the finding of survey research can be enhanced through further research that validates the

measures of literacy development.

REFERENCES

- Ackerman, J. M. (1989). *Reading and writing in the academy*. Unpublished doctoral dissertation. Carnegie Mellon University, Pittsburgh, PA.
- Arbuckle, J. C. (1996). *AMOS (version 7.0)* [Computer program]. Chicago: SPSS.
- Beck, M. L. (1998). L2 acquisition and obligatory head movement: English-speaking learners of German and the local impairment hypothesis. *Studies in Second Language Acquisition*, 20, 311-348.
- Belanger, J. (1987). Theory and research into reading and writing connections: A critical review. *Reading-Canada Lecture*, 5, 10-18.
- Bentler, P. M., & Bonnet, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588-606.
- Bollen, K. A., & Joreskog, G. (1985). Uniqueness does not imply identification: A note on confirmatory factor analysis. *Sociological Methods and Research*, 14, 155-163.
- Bosher, S. (1998). The composing processes of three Southeast Asian writers at the post-secondary level: An exploratory study. *Journal of Second Language Writing*, 7(2), 205-241.
- Bosher, S., & Rowecamp, J. (1998). The refugee/immigrant in higher education: The role of educational background. *College ESL*, 8(1), 23-42.
- Carrell, P., & Connor, U. (1991). Reading and writing descriptive and persuasive texts. *The Modern Language Journal*, 75, 314-324.
- Carson, J. G., & Longhini, A. (2002). Focusing on learning styles and strategies: A diary in an immersion setting. *Language Learning*, 52(2), 401-438.
- Connor, U. (1996). *Contrastive rhetoric*. New York: Cambridge University Press.
- Efron, B. (1987). Better bootstrap confidence intervals. *Journal of the American Statistical Association*, 82, 171-185.
- Esmaeili, H. (2002). Integrated reading and writing tasks and ESL students' reading and writing performance in an English language test. *The Canadian Language Review*, 58, 447-470.
- Flahive, D., & Bailey, N. (1993). Exploring reading/writing relationships in adult second language learners. In J. G. Carson & I. Leki (Eds.), *Reading in the composition classroom: Second language perspectives* (pp. 128-140). Boston, MA: Heinle & Heinle.
- Flower, L. (1994). Literacy action. In L. Z. Bloom, D. A. Daiker & E. M. White (Eds.), *Composition in the twenty-first century: Crisis and change* (pp. 249-260).

- Carbondale, IL: Southern Illinois University Press.
- Flower, L., Long, E., & Higgins, L. (2002). *Learning to rival: A literate practices for intercultural inquiry*. Mahwah, NJ: Lawrence Erlbaum.
- Fornell, C., & Lacker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.
- Gee, J. P. (1998). What is literacy? In V. Zamel & R. Spack (Eds.), *Negotiating academic literacies: Teaching and learning across languages and cultures* (pp. 51-59). Mahwah, NJ: Lawrence Erlbaum.
- Grabe, W. (2002). Reading in a second language. In R. B. Kaplan (Ed.), *The Oxford handbook of applied linguistics* (pp. 49-59). New York: Oxford University Press.
- Hayduk, L. A. (1987). *Structural equation modeling with LISREL: Essentials and advances*. Baltimore: Johns Hopkins University Press.
- Hirvela, A. (2001). Incorporating reading into EAP writing courses. In J. Flowerdew (Ed.), *Research perspectives on English for academic purposes* (pp. 330-346). New York: Cambridge University Press.
- Hirvela, A. (2005). *Connecting reading and writing in second language writing instruction*. Ann Arbor, MI: The University of Michigan Press.
- Horowitz, D. (1986). What professors actually require: Academic tasks for the ESL classroom. *TESOL Quarterly*, 57, 788-806.
- Johns, A. M. (2002). Destabilizing and enriching novice students' genre theories. In A. M. Johns (Ed.), *Genre in the classroom: Multiple perspectives* (pp. 237-248). Mahwah, NJ: Lawrence Erlbaum.
- Kamhi-Stein, L. D. (2003). Reading in two languages: How attitudes toward home language and beliefs about reading affect the behaviors of "underprepared" L2 college readers. *TESOL Quarterly*, 37(1), 35-71.
- Kennedy, M. L. (1985). The composing processes of college students writing from sources. *Written Communication*, 2, 434-456.
- Kim, Kyu-Hwa. (2008). Effects of the integrated-skills approach on elementary school students' writing performance. *Modern English Education*, 9(1), 52-72.
- Kim, Sun-Young. (2006). *Role of the ESL college learners' perspectives on integrating reading and writing: Influence of those perspectives on literacy behaviors*. Unpublished doctoral dissertation. Temple University, Philadelphia, USA.
- Kim, Sun-Young. (2010). A teacher research on integrating English reading and writing: The use of intermediate texts in an EFL class. *Cross-Cultural Studies*, 20, 67-111.
- Leki, I., & Carson, J. (1997). Completely different worlds: EAP and the writing experiences of ESL students in university courses. *TESOL Quarterly*, 31(1), 39-70.
- Lightbown, P. M., Halter, R. H., White, J. L., & Horst, R. H. (2002). Comprehension-

- based learning: The limits of "Do it yourself". *The Canadian Modern Language Review*, 58(3), 427-464.
- Many, J. E., Fyfe, R., Lewis, G., & Mitchell, E. (1996). Traveling the topical landscape: Exploring students' self-directed reading-writing-research processes. *Reading Research Quarterly*, 31(1), 12-55.
- Martin, J. R. (2002). A universe of meaning: How many practices? In A. M. Johns (Ed.), *Genre in the classroom: Multiple perspectives* (pp. 269-283). Mahwah, NJ: Lawrence Erlbaum.
- Nelson, G. L., & Carson, J. G. (1998). ESL students' perceptions of effectiveness in peer response groups. *Journal of Second Language Writing*, 7, 113-132.
- Newell, A. (1990). *Unified theories of cognition*. Cambridge, MA: Harvard University Press.
- Prowse, P. (2003). Extensive reading. *English Teaching Professional*, Issue 27, 40.
- Rinnert, C., & Kobayashi, H. (2001). Differing perceptions of EFL writing among readers in Japan. *The Modern Language Journal*, 85, 189-209.
- Ruddel, M. R. (2005). *Teaching content reading and writing* (4th ed.). Hoboken, NJ: Wiley, Chichester.
- Shanahan, T. (1997). Reading-writing relationships, thematic units, inquiry learning: In pursuit of effective integrated literacy instruction. *The Reading Teacher*, 51(1), 12-19.
- Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing. *TESOL Quarterly*, 27, 757-767.
- Smith, F. (1987). *Joining the literacy club: Further essays into education*. Portsmouth, NH: Heinemann.
- Song, Minjong. (2007). Teaching reading with an interactive approach: Using dialogue journals as a practice. *Modern English Education*, 8(3), 220-242.
- Spack, R. (1998). Initiating ESL students into the academic discourse community: How far should we go? In V. Zamel & R. Spack (Eds.), *Negotiating academic literacies: Teaching and learning across language and cultures* (pp. 85-104). Mahwah, NJ: Lawrence Erlbaum.
- Stotsky, S. (1983). Research on reading-writing relationships: A synthesis and suggested directions. *Language Arts*, 60, 627-642.
- Tierney, R. J., & Shanahan, T. (1991). Research on the reading-writing relationship: Interactions, transactions, and outcomes. In R. Barr, M. L. Kamil, P. Mosenthal & P. D. Pearson (Eds.), *Handbook of reading research* (vol. 2, pp. 246-280). Hillsdale, NJ: Lawrence Erlbaum.
- Torrance, M., Thomas, G. V., & Robinson, E. J. (2000). Individual differences in undergraduate essay-writing strategies: A longitudinal study. *Higher Education*, 39,

181-200.

Tsang, W. K. (1997). A model of extensive reading to improve ESL/EFL proficiency. *Guidelines, 19*(1), 22-33.

Wolfe, P. (2001). *Brain matters: Translating research into classroom practice*. Alexandria, VA: Association for Supervision and Curriculum Development.

APPENDIX

Survey for Reading and Writing Integration

The following survey has been designed to examine the relationships between your views on reading-writing connection and your approaches to literacy behaviors (i.e., reading and writing activities). There is no right or wrong answer to each question, but as you answer each question, you as a college student are supposed to reveal how you feel about the reading-writing integration and its practices.

A. Background Information

1. Name: _____
2. Age: _____
3. Sex: Male _____ Female _____
4. The number of years you have stayed in the US: _____
5. What is your level of education in your home country?
Elementary _____ Secondary _____ University _____ Other _____

Respond to questions below by using the following rating scale.

1 = strongly disagree / 2 = somewhat disagree / 3 = undecided / 4 = somewhat agree / 5 = strongly agree

B. Perception on Integrating Reading and Writing

1.	Better readers are necessarily better writers.	1()	2()	3()	4()	5()
2.	I have to read as much as possible to be a good writer.	1()	2()	3()	4()	5()
3.	Better writers tend to read more than poorer writers.	1()	2()	3()	4()	5()
4.	What you know about reading is similar to what you know about writing.	1()	2()	3()	4()	5()

C. Reading-Writing Practices

1.	I prefer to write what I read (i.e., writing about reading).	1()	2()	3()	4()	5()
2.	I usually write personal responses regularly when I read.	1()	2()	3()	4()	5()
3.	I have to practice writing although I regularly engage in	1()	2()	3()	4()	5()

reading.					
4. When doing my writing assignment, I read the related reading materials.	1()	2()	3()	4()	5()
D. Writing or Reading Notes					
1. When reading, I used to make some types of writing notes.	1()	2()	3()	4()	5()
2. Whenever doing reading assignment, I try to summarize what I read.	1()	2()	3()	4()	5()
3. Before writing an essay (or writing assignment), I used to make some types of note to plan my writing.	1()	2()	3()	4()	5()
4. When reading, I make a mark on the margin of reading texts.	1()	2()	3()	4()	5()
E. Reading-Writing Development					
1. The way that you comprehend text is similar to the way you compose text.	1()	2()	3()	4()	5()
2. Reading and writing are same abilities you need to develop simultaneously.	1()	2()	3()	4()	5()
3. There are many common things shared by both reading and writing.	1()	2()	3()	4()	5()
4. Reading and writing development should go hand in hand.	1()	2()	3()	4()	5()

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