## Full Length Research Paper

# Effective Dual Immersion School Transitions：An Expert Panel Synthesis 

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The Abstract is provided in Four Languages：（a）Arabic；（b）English；（c）Mandarin，and（d）Spanish．
Using the Delphi method，this study was designed and undertaken due to a lack of existing research regarding key factors that support successful transitions of TWI students from elementary to middle and high school．The purpose of this study was first to identify the opinions of experts and practitioners in the field of TWI programs on key factors that support these transitions， and then to rate the importance of these factors as they pertain to the student＇s designation as a dual language student．
Subsequently，based on the results from the panel of 16 experts，the researchers investigated how a group of parents ranked the key factors that the expert panel identified as most and least important for successful transitions．

The experts identified teacher qualification，curriculum and program planning，communication among school personnel，and administrative support as the most important factors to support student transitions．The group of parents rated the factors determined to be important by the panel highly，generally more highly than the expert panel itself，but parents also deemed other factors equally important and gave particular importance to early language reclassification and parent support．
Keywords：Two－way immersion，Delphi study，bilingual education
العربية
باستخدام طريقة دلفي، فقد تم تصميم هذه الدر اسة لنقص المصادر البحثية بشأن العوامل الرئيسية التي تدعم المر احل الانتقالية الناجحة لطلاب المر احل التعليمية المختلفة
（ابتدايي，، اعدادي，، ثانوي ）المشاركين في عملية الدمج المزدوجة Two－way Immersion（TWI）．ان الهاف الاول من هذه الدر اسة هو التعرف علي آراء الخبراء ،
التربويين في مجال برامج عملية الدمج المزدوجة و و في العو امل الرئيسية التي تدعم هذه المر احل الانتقالية، وبعد ذلك تقييم أهمية هذه العو امل لأنها تققيم ، تحدد الطالب كطالب
لغة مزدوجة（Dual Language）وفي وقت لاحق، استنادا إلى نتائج مناقشات 16 خبير و مختص، فان الان الاحثون المشاركون في هذه الار اسة درسوا كيف أن مجموعة من
اولياء الأمور قيموا هذه العوامل الرئيسية و حددوا ما هو الاكثر والأقل أهمية لنجاح العملية الانتقالية．
تقييم اولياء الأمور أيضا من العو امل التي لا تقل أههية بل انهم يعطون أهمية خاصة لإعادة تصنيف بر امج التعلم اللغة المبكر ودعم اولياء الأمور．
الكلمات الرئيسية：الدمج مزدوج الاتجاهات، hDelp ، تعليم اللغات الثثائية

[^0]关键词：双语浸入，Delphi 研究，双语教学

## Spanish

Utilizando el método Delphi，este estudio fue diseñado y llevado a cabo debido a la falta de investigación existente en relación a factores claves que apoyan exitosamente los programas de transición de doble inmersión desde el nivel primario，medio y del nivel secundario．El propósito de este estudio fue primero，el de identificar las opiniones de los expertos y profesionales en el campo de los programas de inmersión en factores claves que apoyan estas transiciones y luego examinar la importancia de estos factores en la forma como estos se identifican con la designación de un estudiante en estos programas．Seguidamente y basado en estos resultados llevados a cabo por un panel de 26 expertos，y un grupo de padres clasificaron los factores claves que el grupo de expertos habían identificado como los más y menos importantes en el éxito de estas transiciones．
Este panel de expertos identificaron las cualificaciones de los maestros，el currículo y el planeamiento del programa，así como la comunicación entre el personal de la escuela，y el apoyo administrativo como los factores más importantes que apoyaron las transiciones de los estudiantes．El grupo de padres por su parte，clasificó los factores determinados a ser importantes por el panel y generalmente los clasificaron más alto que como lo hiciera el panel de expertos．Los padres también identificaron otros factores de igual importancia y le dieron particular atención a la reclasificación del lenguaje temprano así como la intervención del apoyo de los padres．
Palabras claves：Programa de doble inmersión，Estudio Delphi，Educación bilingüe．

## Introduction

## Global Society and Bilingualism

Nearly 30 years ago，Weatherford（1986）emphasized that today＇s students need not only excellent English skills but also a good grasp of a foreign language in the business world for a prosperous future．More recently Cutshall（2009）explained that a key component for developing a globally competent student is second－language acquisition and stated，＂world languages are a core subject in the partnerships＇framework of essential skills＂（p．40）．Providing second－language experiences and knowledge about other cultures is fundamental to any country＇s ability to remain competitive and is increasingly recognized as critical to economic success， national security，and international relations（Rhodes \＆Pufah1， 2009）．Indeed，given the recent trends in immigration，our increasingly interconnected world，and the necessity to learn to communicate with larger numbers of people，it is imperative to re－conceptualize the role of languages other than English in our schools and society（Nieto，2010）．

The contexts of schools themselves in the United States（as well as many other nations）are shifting dramatically，given that they are welcoming students who bring with them diverse racial／ethnic，linguistic，and academic experiences as well as varied life backgrounds（Taylor \＆Sobel，2011）．Of special interest in the present study is the increasing linguistic diversity： $20 \%$ of all children between the ages of 5 and 17 do not speak English at home（Lindholm－Leary \＆Block，2010）． With the recent growth in the number of English language learners，the importance of finding the best way to meet their academic and social needs has increased（Weintraub，2012）． That fact that research supports the need to expose children to language at an early age so they can benefit cognitively and academically（Violette，2012）has played an increasingly important role in determining policy for children who need to
learn English and as well as for all children whose parents want them to learn a second or even a third language．

When English learners are isolated from the curricular mainstream for many years，they are likely to lose ground to those in the instructional mainstream who are constantly pushed ahead，and in order to catch up，students below grade level must make more than one year＇s progress every year to eventually close the achievement gap（Collier \＆Thomas， 2004）．A foremost concern，therefore，is that English language learners constitute a student population vulnerable to poor academic outcomes（Tafoya，2002），and there is an undeniable need for educators to seek ways to overcome the achievement gaps that exist between different groups of school－aged children（Silver，2011）．The practice of disaggregating data by categories such as race，gender，income，and language background，which was more common with the federal No Child Left Behind Act（NCLB）of 2002，has made the achievement gap between English learners and other groups all the more visible（Webley，2012）．
Historically，the United States has demonstrated a weak commitment to the education of its English language learners， and since the early years of the nation，non－English language for instructional purposes has been controversial（Gandara \＆ Hopkins，2010）．Students＇fluency in another language was often perceived as a handicap to their learning English（Nieto， 2010）．Around the beginning of the 20th century，when a new wave of immigrants of Italian，Greek，Jewish，and Slavic descent entered the United States，a public outcry led to Congress passing a law adding English proficiency as a requirement for naturalization（Monroy，2012）．Pressure toward English monolingualism was frequent throughout the first half of the last century，and it wasn＇t well into the 1960s，
as a result of political pressure brought to bear by Mexican American groups, that Congress passed the Elementary and Secondary Education Act of 1968, also known as the Bilingual Education Act, which provided funding for bilingual programs. Bilingual programs implemented at that point were mostly transitional, with the focus of moving students into English language proficiency as quickly as possible (Monroy, 2012). About the same time, however, in certain locations, especially in Dade County, Florida, educators were developing late-exit programs and experimenting with dual language programs in which students proceeded with developing two languages (English and Spanish) throughout their entire schooling (Freeman, Freeman, \& Mercuri, 2005). It was in that context that two-way immersion programs evolved in the United States.

## Two-way Immersion Programs

Two-way immersion (TWI) has proven to be a promising approach to nurture children's linguistic and cultural heritages. These kinds of immersion programs constitute a bilingual program where curriculum is taught in two languages so that all students, as emerging bilinguals, learn social and academic skills in their primary and an additional language (GiacchinoBaker \& Piller, 2006). These programs are sometimes also referred to as dual language, bilingual immersion, or two-way bilingual programs, and they include elements of developmental bilingual programs (Lindholm-Leary, 2001). TWI programs build on the bilingual potential of native English speakers and the linguistic foundation of the increasing number of students who come from homes with other nonEnglish languages (Giacchino-Baker \& Piller, 2006). In these programs, native English speakers and English learners learn alongside each other, with programs varying in the proportion of English and non-English language use during class time. $50: 50$ and $90: 10$ models are the most common, the former with a balanced proportion of each language taught from kindergarten onward, and the latter beginning with almost all of the curriculum taught through the non-English language and moving gradually toward a balance of the two languages, but never less than $50 \%$ in the non-English language (Howard \& Sugarman, 2007).
TWI programs seem to provide an ideal way to develop deep proficiency in the target language while increasing student achievement in both languages. Students in the process acquire a second language naturally through the entire curriculum and throughout the instructional day from the beginning of a student's school years (Collier \& Thomas, 2004). Scholars have found that in order for English language learners to be academically successful in a second language, they must be immersed in an environment where their needs are being met socio-culturally, linguistically, academically, and cognitively (Pincock, 2011), and these programs seem to meet those needs.
Over the past 40 years, numerous studies have been conducted on TWI, and various syntheses of the research have demonstrated the effectiveness of these programs to
accomplish their linguistic, academic, and social objectives (Howard et al., 2003; Christian et al., 2004; Lindholm-Leary \& Borsato, 2006). While test scores in English for students in these programs have tended to be low in the primary grades, additional findings have demonstrated that English learners attain grade levels skills in English by the middle school years while achieving high standardized test scores in their home language as well (Lindholm-Leary \& Borsato, 2006). The researchers have theorized that the effectiveness of the TWI approach has to do in part with it being a late-exit (or "nonexit") program, which allows English learners to fully progress in their home language so that they can benefit from the developmental advantages of full bilingualism. The same researchers also found that that student attitudes toward learning and toward the non-English language is impacted positively in these programs.

More recently, researchers in this field have continued to find strong results for two-way immersion programs (LindholmLearly \& Genesee, 2010). This has been the case for varied demographic and socio-economic contexts (Lindholm-Leary \& Block, 2010) and has continued to include evidence for positive attitudinal development (Block, 2011). Goldenberg (2013), focusing on the issue of primary language support for English learners, stated that while it is not unanimous, it is generally agreed that learning to read in their home language helps English language learners boost reading skills in English. In light of this he states that two-way programs offer a hopeful model for the education of English language learners and promotes bilingualism and bi-literacy for non-English learners.

## Transition From Elementary to Middle and High School for students in TWI Programs

The growth and expansion of elementary TWI programs are causing an increasing interest in the design and implementation of new secondary TWI programs (Montone \& Loeb, 2000). In the past, these programs have mainly been at the elementary school level. The Center for Applied Linguistics (2011) reported a total of 448 language immersion schools in the United States, of which 434 are preschool and elementary school programs, but only a few 128 middle schools and 41 high schools provide TWI programs nationwide.
Transitions, such as the ones that students experience between elementary and middle school, or between middle and high school, are often a difficult time of life, and research has highlighted that developmental and academic difficulties for students are often connected with these times of change (Akos, 2002). Associated with the transition from elementary school to middle and high school, students experience many alterations in their school environment, such as the studentteacher relationship that changes from small-group and individual instruction to whole-class instruction (Alspaugh, 1998), or managing new friendship and peer groups as well as navigating a new school and a different class schedule with more difficult homework (Grills-Taquechel, Norton, \& Ollendick, 2010). In middle school, it is typical that young
adolescents encounter more of everything: more space to navigate, more people with whom to interact, and more choices to make in terms of classes, friendships, and activities (Parker \& Neuharth-Pritchett, 2009). In addition, this transition has been associated with changes in anxiety and other psychological problems (Grills-Taquwchel et al., 2010). Moreover, in most industrialized countries, problems of school violence are salient especially in middle and junior high school, and bullying in the form of physically, verbally, relationally, or sexually aversive behaviors increases as students transition to middle school (Pellegrini, 2002).

Research suggests that teacher support can play an important role for early adolescents in the midst of their difficult transitions (Grills-Taquechel et al., 2010). Like all educators around the nation, middle school teachers encounter classrooms comprised of an unprecedented number of students from various cultural, ethnic, and racial backgrounds, so the importance but also the complexity of providing support for students for this phase of their lives cannot be underestimated (Allison \& Rehm, 2007; Parker \& Neuharth-Pritchett, 2009). Meeting the needs of diverse students is even more challenging for middle school teachers than other teachers because they must also help children deal with the unique developmental changes that occur in students during these years (Johnson, 2005). It would seem to make sense, then, that teachers and administrators of programs such as TWI should be prepared to provide the specific kinds of support that facilitate a smooth transition for middle school and early high school students. Unfortunately, studies to date, while making many general recommendations for these programs (Lindholm-Leary \& Geneseee, 2010), have not focused on this specific issue.

## Method

Increased understanding of key factors that support the successful transition of TWI students from elementary to middle school and from middle school to high school is an urgent need as increasing numbers of TWI students advance through the K-12 system. As previously stated, at the present time, research is lacking as to which key factors are necessary for successful transitions. Nonetheless, there is a sufficient number of experts in the TWI field to begin to develop a common understanding about what these factors might be - in fact, of bilingual programs, TWI has been the one most carefully studied (Linholm-Leary \& Borsato, 2006; LindholmLeary \& Genesee, 2010). It is imperative to identify these factors so that newly established TWI programs and schools, as well as teachers and administrators, can build on the many years of experience of experts in that field. In order to identify key factors that successfully support current TWI students' transition into middle and high school, the following research questions were presented to a panel of experts (researchers, teachers, and principals) in dual language programs:

1. What are key factors that support current elementary TWI students as they transition to middle and high school?
2. What is the relevance of the key factors identified in Research Question 1 as they pertain to the student's designation as a dual language student?

## The Dephi Method of Qualitative Inquiry

The iterative process to collect and refine the anonymous conclusions of experts using a series of data collection and analysis techniques intermingled with feedback is called the Delphi method (Skulmoski, Hartman, \& Krahn, 2007). It is an accepted method for gathering data from respondents within their domain of expertise (Hsu \& Sandford, 2007) and is "useful where the opinions and judgments of experts and practitioners are necessary" (Yousuf, 2007, p. 1). For the purpose of this study, the panel of experts consisted of researchers/authors, teachers, and administrators/principals, defined as follows:

Researchers/authors. This study included seven researchers who have been working in the field of dual language programs and have published two or more articles or books in the past 10 years. They hold a doctoral degree and have previous teaching experience. Selecting researchers was crucial for the composition of the expert panel because they are experienced professionals who can provide an informed view on issues in their given field (Nwori, 2011). A necessary condition for determining expertise is social nomination and recognition (Agnew, Ford, \& Hayes, 1997). It was assumed that the process though which these experts passed in order to accomplish and publish their research constituted the necessary social recognition for the present study.

Teachers. This study included six teachers holding a state-required teaching credential and who had a minimum of five years of teaching experience in dual language programs. The reason to include teachers into the expert panel group was to overcome the circumstance that Morrell (2004) described: "Too often teachers, the primary agents of activism and reform in schools, are left out of larger discussion about curriculum and pedagogy" (p. 90).

Administrators/principals. This study also included three administrators and principals with a minimum of five years of experience leading a dual language/immersion school or spearheading TWI programs. Furthermore, they hold a staterequired administrative credential. Administrators and principals generally oversee multiple dual language programs and can contribute relevant input (Pill, 1971), and like the researchers, hold social nomination and recognitions, a necessary condition for determining expertise (Agnew et al., 1997).

The above-mentioned composition of the expert panel responds to Mead and Mosley's (2001) recommendation that a heterogeneous sample is better for the validity of the finding. This selection also aligns with Hsu and Sandford's (2007) declaration that Delphi participants should be highly trained and competent within the specialized area of knowledge related to the target issue. The selected panelists came from
the geographical area of the United States- researchers, administrators, or teachers of dual language immersion programs of any language. Only one Delphi panel member was chosen from a TWI program or school, as panelists couldn't be from the same site. The selection, a total of 16 panelists who met the requirements, was chosen based on their willingness to participate in the study and on fulfilling the criteria of expertise.
In round 1, the expert panelists, responding through Internetbased questionnaires, were prompted to list key factors that support current elementary TWI students as they transition to middle and high school. All returns were carefully reviewed and reported key factors were eliminated only when the same factors was expressed in different words by other panelists. In the case that factors were too intricate to list or multiple factors were listed in a single entry, the researcher either edited or separated them as needed without changing their meaning.

In round 2, the same experts rated the degree of importance for each of the key factors captured from the questionnaires in round 1 as they pertain to students' designation as a dual language student. The rating range of the items was placed on a Likert scale from 1 to 5 . The experts had to rate the relevance of key factors with the following criteria: 1 meant very unimportant, 2 unimportant, 3 neither important nor unimportant, 4 important, and 5 very important.

## Parent Questionnaires

Separate from the Delphi study, which continued into a further stage not reported here, the results from Round 2 were shared with a group of parents of dual language sixth grade students, who had just completed their year of transition from elementary school to middle school. The parents were all Spanish-speakers, mainly immigrants from Mexico, whose children were current or reclassified English learners from the same sixth-grade dual language class in school in the Los Angeles area. Although the number of parents, 15, was similar to the number of the panel members, the expertise of the parent group cannot in any way compare to the expertise of the members of the Delphi panel. Nonetheless, parents are essential stakeholders within any program that they choose for their children, and this is perhaps even more so for TWI programs, in which parents are often asked to make long-term commitments to keeping their children in the program. Therefore, the researchers in this study believed that parental assessment of the key factors identified by the panel members could provide insight into the perceived value of the factors by these stakeholders, and could thus possibly contribute to the urgency of their implementation if parents responded positively, or to the need for parent education, if parents were in substantive disagreement. The researchers hoped to gain further insight by asking parents if they knew of additional factors that should be considered as key to smooth transitions for TWI students.

Following the general guidelines for questionnaires described by Johnson and Christensen (2014), and in order to increase parent response rate and to focus on factors that the panel rated highest and lowest, only 15 of the 35 total factors identified by the panel were presented to parents. Eight factors were chosen from ones that the expert panel rated highest and seven were chosen from the lowest rated ones. Several from among the lower rated factors were removed since they pertained only to high school (for example, one regarding A.P. tests), and other factors from ones that the panel rated in the middle range were left out largely for brevity. The shorter questionnaire, translated to Spanish, containing the highest and lowest rated items (listed in random order) pertinent to the middle school level, and using the exact same Likert rating scale (from "not at all important" to "very important") as in Round 2 of the Delphi study, allowed the researchers to find out with a more efficient instrument if parents generally agreed with the expert panel's ratings. Again in agreement with Johnson and Christensen (2014), an open-ended question was included that allowed for parent input about additional factors. Due to the difference in familiarity with technical vocabulary used to discussed TWI, terms in the Spanish translation were simplified and the entire translation was vetted with at least one reader who, typical of many of the parents, did not complete high school level education in Mexico.

## Results

It was evident from the results of the first round of the study that the experts identified a variety of key factors that support the successful transition of elementary TWI students to middle and high school. Table 1 presents the condensed list of the 35 most relevant key factors that support elementary TWI students as they transition to middle and high school. The 35 factors have been sorted into four major themes: (a) program/curriculum, (b) culture, (c) strategies, and (d) support/staff.

Table 1
Experts' Key Factors, Sorted
\# Factor
1 Alignment of programs among elementary, middle, and high school
2 Very well-implemented continuation program at middle and high school
3 Informed middle and high school teachers about the needs of entering students/communication between schools
4 Communication between educators at every level
5 Strong administrative support from "receiving" and "sending" school
6 Administrative support from the district
7 High expectations for fifth- and sixth-grade students

8 Challenging curriculum in both Spanish and English that is tied to the common core and state standards
9 TWI courses should satisfy core content requirements whenever possible so that students can take other electives.
10 Reclassify students before moving to middle school so they have the opportunity to choose other electives
11 AP Spanish course as freshman in order for the TWI students to fit into the Spanish for Native Speakers program
12 High school offers Spanish literature to allow continuation of high levels of instruction
13 Ample time, preferably $50 \%$ of the school day, to teach multiple subjects in the minority language
14 Understanding the difference between advanced Spanish classes in secondary school and language arts taught through an immersion methodology

Culture
15 TWI program needs to be centered in the school's identity, representing the value on the campus and make use of the bilingual students to make the language program a centerpiece. If the program is simply an add-on, it will remain marginalized.

16 Create a culture within the school of biliteracy
Strategies
17 Instilling a sense of love for learning languages by supporting students' zone of proximal development (ZPD). Vygotsky calls ZPD the difference between what learners can do without help and what they can do with help.
18 Support a strong self-identity as bilingual, biliterate, and bicultural learner through teaching student to have a "growth mindset" (C. Dweck: Belief that most basic abilities can be developed through dedication and hard work)
19 Same supports any student needs with that transition
20 Development of vocabulary and writing in two languages.
21 Ability to read and write in two languages at the grade equivalency level
22 Expose students to oral presentations from K-5 to build self-confidence in speaking in public and dealing with others
23 Independent learning (learning how to learn; study skills and knowing how to find information in the two languages)
24 Becoming comfortable with the norms and way of doing things within the two cultures represented by the two languages.

25 Developing "funds of knowledge" (knowledge students gain from their family and cultural backgrounds, to make their classrooms more inclusive)
26 Developing students' social skills and tolerance for cultural and personal diversity by having them collaborate with their peers inside and outside the classroom
27 Older students assist in academic and social activities with younger students or within the community allowing the more practical application of their second language, building confidence and social skills in the needed areas
28 Creation of measures across fifth and eighth grade for competency testing to regularly monitor the students' progress as well as address the areas of the fluidity of teaching through the grade levels
29 Creative problem solving
Support/staff
30 Parental support and education of parents, such as workshops to emphasize the importance of staying in and continuing the program and how to support students' learning
31 Community support/community service opportunities to use the language within communities for authentic experiences with the target language community
32 Integration of TWI students with the rest of the school/taking classes with students who come from other elementary schools
33 Highly informed, engaged, and passionate teachers to keep students motivated to continue to use the minority language
34 Teachers with high level of language proficiency to provide challenging language experience for students (not foreign language teachers)
35 Staff's belief and confidence in the program goals and in adjusting the schedule to meeting dual language (DL) student needs

Research Question 2 asked the expert panel to rate the relevance of the 35 key factors that emerged from Round 1, as these factors pertain to the student's designation as a dual language student. Table 2 presents the descending mean ratings of the 35 factors. Table 2 also displays the minimum and maximum scores given for each factor and the standard deviation. To show the average dispersion of scores around the mean, the standard deviation, a numerical index that indicates the average variability of the scores, tells us about the distance of the scores from the mean (McMillan \& Schumacher, 2010).

It was evident that the highest ranked factor, agreed upon by $100 \%$ of the panelists, was Factor 34, "Teachers with high level of language proficiency to provide challenging language experience for students," closely followed by Factor

33, "Highly informed, engaged, and passionate teachers to keep students motivated to continue to use the minority language," and Factor 35, "Staff's belief and confidence in the program goals and in adjusting the schedule to meeting dual language student needs."

Although the mean scores are informative in regard to the highest rated items, they do not give the full picture of experts' ratings, since the items are average and extreme scores distort the mean average. The weakness of the mean is that when a distribution contains extremely high or low scores, it is pulled toward the extreme score (McMillan \& Schumacher, 2010). For that reason, the standard deviation was calculated for all 35 factors. The smaller the standard deviation, the smaller the variability, or in other words, the smaller the amount by which participants differ from each other (Patten, 2012). For Factor 34 , where there was a $100 \%$ agreement among all panelists (mean score of 5), the standard deviation was 0 . For the second and third highest rankings, Factors 33 and 34, both with mean scores of 4.94 , the standard deviation was 0.24 .
Obviously there was strong agreement among panelists on the relevance of these factors.
Table 2
Factors Sorted by Descending Mean by Experts

| Factors | Mean | Std. Dev. | Min | Max |
| :---: | :---: | :---: | :---: | :---: |
| 34. Teachers with high level of language proficiency to provide challenging language experience for students | 5.00 | 0.00 | 5.00 | 5.00 |
| 33. Highly informed, engaged, and passionate teachers to keep students motivated to continue to use the minority language | 4.94 | 0.24 | 4.00 | 5.00 |
| 35. Staff's belief and confidence in the program goals and in adjusting the schedule to meeting DL student needs | 4.94 | 0.24 | 4.00 | 5.00 |
| 7. High expectations for fifth- and sixth-grade students | 4.88 | 0.33 | 4.00 | 5.00 |
| 4. Communication between educators at every level | 4.81 | 0.39 | 4.00 | 5.00 |
| 6. Administrative support from the district | 4.81 | 0.39 | 4.00 | 5.00 |
| 20. Development of vocabulary and writing in two languages | 4.80 | 0.40 | 4.00 | 5.00 |


| 3. Informed middle and high | 4.75 | 0.43 | 4.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- | school teachers about the needs of entering students/communication between schools


| 5. Strong administrative <br> support from "receiving" <br> and "sending" school | 4.75 | 0.43 | 4.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |
| 22. Expose students to oral | 4.63 | 0.48 | 4.00 | 5.00 | presentations from K-5 to build self-confidence in speaking in public and dealing with others

2. Very well-implemented continuation program at middle and high school

| 21. Ability to read and write <br> in two languages at the <br> grade equivalency level | 4.63 | 0.60 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |
| 8. Challenging curriculum | 4.56 | 0.61 | 3.00 | 5.00 | in both Spanish and English that is tied to the common core and state standards


| 25. Developing "funds of <br> knowledge" (knowledge <br> students gain from their <br> family and cultural | 4.56 | 0.61 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |
| backgrounds, to make their <br> classrooms more inclusive) |  |  |  |  |
| 31. Community <br> support/community service | 4.56 | 0.61 | 3.00 | 5.00 |

support/community service opportunities to use the language within communities for authentic experiences with the target language community

| 1. Alignment of programs | 4.50 | 0.61 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |

among elementary, middle, and high school

| 9. TWI courses should <br> satisfy core content | 4.50 | 0.61 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- | requirements whenever possible so that students can take other electives.


| 12. High school offers <br> Spanish literature to <br> allow continuation of <br> high levels of instruction | 4.50 | 0.61 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |
| 13. Ample time, 4.50 0.61 3.00 5.00 年 |  |  |  |  |

preferably $50 \%$ of the school day, to teach multiple subjects in the minority language
15. TWI program needs $\begin{array}{lllll}4.50 & 0.61 & 3.00 & 5.00\end{array}$ to be centered in the school's identity, representing the value on the campus and make use of the bilingual students to make the language program a centerpiece. If the program is simply an add-on, it will remain marginalized.
26. Developing students’ social skills and tolerance for cultural and personal diversity by having them collaborate with their peers inside and outside the classroom
27. Older students assist in academic and social activities with younger students or within the community allowing the more practical application of their second language, building confidence and social skills in the needed areas
23. Independent learning (learning how to learn; study skills and knowing how to find information in the two languages)
30. Parental support and $\begin{array}{lllll}4.56 & 0.70 & 3.00 & 5.00\end{array}$ education of parents, such as workshops to emphasize the importance of staying in and continuing the program and how to support students learning
19. Same supports any student needs with that


parents, such as workshops to emphasize the importance of staying in and continuing the program and how to support students learning
35. Staff's belief and
confidence in the program goals and in adjusting the schedule to meeting DL student
5. Strong
administrative support from "receiving" and "sending" school

| 33. Highly informed, <br> engaged, and <br> passionate teachers to <br> keep students <br> motivated to continue <br> to use Spanish | 4.73 | 0.46 | 3.00 | 5.00 |
| :--- | :--- | :--- | :--- | :--- |
| 3. Informed middle <br> and high school <br> teachers about the <br> needs of entering <br> students/communicati <br> on between schools | 4.67 | 0.62 | 3.00 | 5.00 |
| 6. Administrative <br> support from the <br> district | 4.6 | 0.63 | 3.00 | 5.00 |
| 29. Creative problem <br> solving <br> 32. Integration of TWI <br> students with the rest <br> of the school/taking <br> classes with students <br> who come from other <br> elementary schools | 4.53 | 0.52 | 0.70 | 3.00 |

Parents ( P ) agreed in giving their highest average ratings to four of seven items to which the expert panel (EP) rated as having the highest relative importance, including three of the top four rated factors by the expert panel:

Teachers with high level of language proficiency to provide challenging
language experience for students $(P=4.93 \quad E P=5)$
High expectations for fifth and sixth-grade student
( $\mathrm{P}=4.93 \mathrm{EP}=4.94$ )
Development of vocabulary and writing in two languages ( $\mathrm{P}=4.93 \mathrm{EP}=4.80$ )
Staff's belief and confidence in the program goals and in adjusting the schedule to meeting DL student $\quad(\mathrm{P}=4.80 \quad \mathrm{EP}$ $=4.94$ )
It is worth noting, however, that all of the items that the expert panel rated among the top items had ratings by the parents of at least 4.6. On the other hand, parents only agreed with the expert panel on two items as having the least relative importance, and only in the case of one factor (Integration of TWI students with the rest of the school....) was the mean similar:
Creative problem solving ( $\mathrm{P}=4.53$ EP 3.93)
Integration of TWI students with the rest of the school/taking classes with students who come from other elementary schools ( $\mathrm{P}=4.27 \quad \mathrm{EP}=4.25$ )
Also in contrast, parents rated the following items relatively high (and absolutely high) that the expert panel rated relatively low:
Reclassify students before moving to middle school so they have the opportunity to choose other electives $\quad(\mathrm{P}=4.93$ $\mathrm{EP}=3.8$ );
Creation of measures across fifth and eighth grade for competency testing to regularly monitor the students' progress as well as address the areas of the fluidity of teaching through the grade levels ( $\mathrm{P}=4.93 \mathrm{EP}=4.44$ );
Parental support and education of parents, such as workshops to emphasize the importance of staying in and continuing the program and how to support students learning ( $\mathrm{P}=4.8$ $\mathrm{EP}=4.56$ );
Support a strong self-identity as bilingual, billiterate, and bicultural learner through teaching students to have a "growth mindset" ( $\mathrm{P}=4.80 \quad \mathrm{EP}=4.38$ );
Becoming comfortable with the norms and way of doing things
within the two cultures represented by the two languages ( $\mathrm{P}=4.80 \quad \mathrm{EP}=4.31$ ).
It is important to recall that parents rated almost all of the items as "very important", with only one item having an average below 4.5 on the scale of 5.0 . One would think that rankings could have less validity when averages are all so high and so similar.
Questionnaires afforded parents the opportunity to provide additional key factors, if, based on the experience of their own children, they considered any factors to be lacking from the expert list. Only two parents offered responses to this question. One mentioned the importance of the example and influence of excellent teachers, and the other alluded to the importance of students being able to write well in both languages and thus express their emotions.

## Discussion

The panel of experts identified a variety of key factors that support the successful transition of elementary TWI students to middle and high school. After careful review by the researchers, 35 different factors were identified and assigned to the following four major themes:

1. Program/curriculum, for example, "Alignment of programs among elementary, middle, and high school," "High expectations for fifth- and sixth-grade students." This theme included 14 factors.
2. Strategies, for example, "Development of vocabulary and writing in two languages," "Expose student to oral presentations from K-5 to build self-confidence in speaking in public and dealing with others." This theme included 13 factors.
3. Support/staff, for example, "Staff's belief and confidence in the program goals and in adjusting the schedule to meeting dual language student needs," 'Teachers with high level of language proficiency to provide challenging language experience for students." This theme included six factors.
4. Culture, for example, "Create a culture within the school of biliteracy." This theme included two factors.
Not all themes, however, emerged among the highest ranking factors in Round 2 of the Delphi study. The importance of cultural aspects for student support during the transition was only mentioned by two experts, which is low considering that developing a positive cross-cultural attitude is an anticipated outcome of TWI programs (Reyes \& Vallone, 2007). The majority of the identified factors, and the highest rated factors, related to support/staff, program/curriculum, and strategies.

According to Cuenca (2011), actions of teachers are deeply intertwined with the responsibility of leading children into adulthood; this therefore places teachers in a position of influence, given that their actions speak to the moral responsibility they bear for the welfare and development of students. It was evident from the most highly rated factors that emerged from this Delphi panel that indeed teacher actions have great importance. Panelists stated that it is crucial to employ qualified educators for a successful transition of TWI elementary school students to middle and high school. In fact, one hundred percent of the participants ranked "Teachers with high-level of language proficiency to provide challenging language experience for students" as very important. This key factor was closely followed by "Highly informed, engaged, and passionate teachers in order to keep students motivated to continue to use the minority language," and "Staff's belief and confidence in the program goals and in adjusting the schedule to meeting dual language student needs" with high mean scores and small standard deviation, meaning that there was strong agreement among panelists on the relevance of these factors. It is clear from the survey data collected that teacher qualification and their engagement and confidence in the dual language programs are most crucial for TWI students and their transition from elementary to middle and high school. This is in
agreement with Lindholm-Leary and Genesee's (2010) general recommendations for effective TWI programs.
A second salient theme, related to curriculum, emerged from the following factors with high rankings shown by high mean scores and small standard deviation: "High expectations for fifth- and sixth-grade students" and "Development of vocabulary and writing skills in two languages." The following key factors, rated as very important and important resulting in the cumulative total in the 90th percentile range, can also be assigned to the theme of curriculum: "Challenging curriculum in both Spanish and English that is tied to the common core and state standards," "TWI courses should satisfy core content requirements whenever possible so that students can take other electives," "High school offers Spanish literature to allow continuation of high levels of instruction," and "Ability to read and write in two language at the grade equivalency level." The overall findings regarding curriculum aligned with Lindholm-Leary's (2001) definition that immersion is an approach of foreign language instruction in which the regular school curriculum is taught through the vehicle of a second language as well as with Thomas and Collier's (2004) understanding about the importance of learning a second language naturally throughout the day.

A third theme, one not distinguished after Round 1 of the Delphi study, was communication, as "Communication between educators at every level" received the fifth highest mean and a small standard deviation, and "Informed middle and high school teachers about the needs of entering students/communication between schools" was ranked with the eighth highest mean score. Based on the context of the experts' responses, this type of communication relates to the collaboration of teachers and administrators in regard to the students' success. Finally, a fourth theme, again not clearly distinguished in Round 2, was administrative support, such as in the key factors, "Strong administrative support from receiving and sending school," and "Strong administrative support from the district," also surfaced from the higher ranked items.
With respect to factors that the expert panel deemed most important, parent ratings were quite similar, with three out of four of the expert panels' most highly rated factors also among the factors most highly rated by parents. On the other hand, it was not surprising that parents gave more importance than did the expert panel to the issue of early language reclassification for English proficiency, since the parents who responded are primarily Spanish speaking and likely experience more anxiety about the issue of learning English than those on the panel, who have a longer term perspective on this issue and are aware of the tendency of some students to need more time to reclassify. The difference of position within society might also explain the relatively greater parent concern for issues regarding bi-literacy and biculturalism. Greater parent concern for "parent support and education for parents" was certainly not unexpected and highlights the importance of giving parents
a voice about the importance of these factors. It is worth noting, though, that on all of the factors -- with the exception of the issue of early reclassification for the panel -- importance ratings by both parents and the panel averaged over 4.3 out of a possible 5 points. . Therefore, perhaps the most significant finding with respect to the parents is the broad agreement on the importance of virtually all of the factors evaluated.
It is worth reiterating here that the parent group does not represent a parallel in any way to the expert panel, except for the similar number of respondents. The parents were from one classroom in one specific TWI program. In this sense, the parent panel functioned more as a focus group to help the researchers reflect upon how this essential group of stakeholders perceives the factors identified by the expert panel. The fact that parents gave great importance to the factors deemed crucial to the experts is simply an indication that these factors are clear and obvious to others within the academic setting, and it underscores the importance of implementing these factors. At least in the case of this one group of parents, there is no need for parent education to alert parents to the importance of these factors. Additional factors deemed important by the parents remind us of the perceived importance of factors of language reclassification and parent support, even if not considered crucial by the experts.

## Conclusion

Research has affirmed that TWI programs are a promising approach to nurture children's linguistic and cultural heritages where curriculum is taught in two languages so all students learn social and academic skills in their primary and an additional language (Giacchino-Baker \& Piller, 2006). In this Delphi study, the expert panelists, consisting of seven researchers/authors, three principals, and six teachers, all researching, working, or teaching in the field of dual language education, identified 35 factors that support the successful transition of TWI students from elementary to middle and high school.

Upon analyzing the results of the Delphi panelists, qualified teachers, curriculum, communication, and administrative support emerged as the most highly ranked themes. Engaged, highly informed, and passionate teachers with high language proficiency were perceived as the most crucial to support current TWI elementary students as they transition to middle and high school. This implies that teachers must have a deep understanding of and passion for immersion education and a reflective personal nature. In order to maintain excellence in personnel in dual language programs, it is essential to provide high-quality professional development opportunities to teachers and administrators and to support them in the form of providing ample time for planning and collaboration. TWI program structure, such as alignment of TWI programs, program planning, and curriculum, with an emphasis on setting high expectations for fifth- and sixth-grade students, was the second most highly rated factor for successfully supporting current TWI elementary students as they transition to middle
and high school. This implies that it is necessary to carefully plan curriculum that aligns across all grades in order to ensure that students are at grade level in both languages. A special focus needs to be on integrating language objectives (vocabulary, grammar, writing) into the content area objectives and curriculum. In line with program planning, it is also necessary for the district to ensure continuity of TWI program curriculum by having a long-term plan of the trajectory of the program in all aspects (campus, staff, PR, recruitment plan, afterschool programs, etc.).

As in any successful organization, it is especially important that good communication is in place for a successful transition of TWI elementary school students to middle and high school. This includes communication and collaboration among educators and administrators in regard to consistent program goals as well as ensuring that individual students receive what they need. Communication and collaboration across different schools and the community enhances the favorable outcomes of TWI programs and a successful transition of elementary students to middle and high school. Finally, administrative support for TWI programs, such as support from the school district and from the "receiving" and "sending" schools, was the final high-priority category of factors that support current TWI elementary students as they transition to middle and high school. It is necessary that administration of a school district be directly engaged in and understands the TWI programs and their continuity. This implies that there are long-term plans of the trajectory of the TWI programs, as already elaborated.
The fact that the TWI parents agreed with the panel on most of the factors to which the panel gave the highest rating for student transitions points to the urgency of carrying out these factors and indicates as well that there is no need for extensive parent education to bring them into agreement with the prioritization of the panel. On the other hand, parents deemed several other factors as equally important that were less significant to the expert panel, and they gave importance to some factors - such as early language reclassification and parent support within the program - for which many experts showed less concern. As crucial stakeholders for TWI, the concerns of the parent group deserve attention, even if in the form of further parent consultations in other TWI locations.

There are several limitations to this study. The expert opinions captured by this Delphi study are extremely important in the field as they represent the experts' observations of TWI programs over many years as well as the syntheses of empirical studies that many of them have carried out personally. Nonetheless, the ranking of the factors, even as done by the experts, is ultimately a subjective process; the TWI community would benefit from additional experimental and semi-experimental studies, as well as various qualitative approaches, that could point to a clearer understanding of the differential impact of the factors mentioned. In particular, further confirmation is necessary to demonstrate the implied causal (or even correlational) relationship between the highest
rated factors and healthy transitions for students between school levels in TWI programs. For example, it would be worthwhile, based on this study, to try to correlate teachers' bilingual proficiency levels -- self-rated or otherwise -- with parent satisfaction or even with student performance in some specific academic domain related to TWI.
Much greater limitations, many of them already mentioned, apply to the comparison of the parent groups' ratings to those of the expert panel. While the expert panel and the group of parents were equivalent in size, the panel was comprised of individuals representing different parts of the country as well as different schools and school districts. In contrast, the parent group was from one school and in fact, one class in one school. Moreover, all the parents who responded are predominantly Spanish speaking and don't represent the parents of initial English speaking students often present in dual language programs and necessarily present in two-way models. It would be important to include a much broader sample and acquire representation of all groups of parents whose children are in TWI programs to establish a similar list of prioritized factors as was determined by the expert panel.
It is also worth mentioning that the comparison between the expert and parent groups, though using means and standard deviations, was not a statistical comparison. The sample sizes were too small to have the statistical power for valid comparisons of group means. Similarities and differences noted, though numerically based, are more in the realm of a qualitative analysis. While this does not lessen the importance of the comparisons, it indicates the need for caution in using the analysis to make unwarranted conclusions about them. A study based on a larger sample of teachers and administrators on the one hand and parents on the other, would be necessary to offer data for an insightful quantitative analysis. In addition, comments or ratings from secondary school staff members would enhance the robustness of these findings. If elementary and secondary staff report similar ratings, these results have even more salience. The results of the comparison found in this study may have their greatest value in suggesting hypotheses that require further investigation - whether qualitative or quantitative.

Focusing on the transition of TWI students from elementary to middle and high school, the findings of this study can help both newly established and longer-term TWI programs and schools, along with the teachers and administrators sustaining these programs, to gain knowledge and provide ideas on how to adequately and effectively support TWI students. Having solicited expert opinion in the field of dual language education, the findings can significantly contribute to the specialty field of growing two-way immersion programs in the United States, and perhaps, in other nations that are experimenting with dual language programs where students face similar transitions.

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[^0]:    Mandarin
    由于现有的研究缺乏支持双向浸入教学（TWI）从小学过渡到初，高中的成功过渡的关键因素，本文采用了 Delphi 方法来设计和开展了本项研究。这项研究的目的是首先确定该领域专家和执业者对有助于 TWI 的过渡关键因素的看法，然后根据与双语学生相关性来判定其重要性。随后，基于 16 个专家组的结果，研究人员调查了一组家长如何评判这些专家所评定的最重要和最不重要的成功过度关键因素。
    专家们认为教师资格，课程和方案规划，学校工作人员之间的沟通和行政支持是最为重要的支持学生过渡的因素。家长们通常会给予专家组评分高的因素更高的评分，但家长们也认为其他因素也一样重要，同时他们也认为早期语言的重新分类和家长的支持也特别重要。

