

Differentiated Instruction:  
Applying the Work of C.A. Tomlinson in the Primary Literacy Classroom

by

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HBA, Lakehead University, 2006  
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## **Supervisory Committee**

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### **Abstract**

This project examines differentiated instruction (DI), and its implications for teaching language and literacy at the primary level. In particular, this project critically examines Carol Ann Tomlinson's model of differentiation to determine how Tomlinson's work may be applied to the teaching of primary language and literacy. To do this, this project examines the theoretical framework that underpins Tomlinson's DI model, and considers the weaknesses and strengths of Tomlinson's work, as well as the reasons why Tomlinson's work has been so well received by educators.

This project culminated in the adaptation of a tiered learning tool, *Think-Tac-Toe*, that may be used by teachers as part of a differentiated language curriculum for primary students. The learning tool also serves as the basis for a professional development workshop for educators about differentiated instruction in the primary grades, which is described in the appendices.

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# **Chapter 1**

## **Introduction**

### **What is Differentiated Instruction?**

According to the ancient Chinese philosopher Confucius, in order to teach effectively, educators must respond to students' varying abilities, by teaching students at their particular readiness levels (Tomlinson, 2005b). Indeed, in any classroom, students exhibit a range of abilities and learning needs. It is the responsibility of the teacher to be prepared for these differences and tailor their curriculum and instruction to meet each student's needs, ensuring every chance of academic success for all students.

Differentiated instruction (DI) offers teachers a means to meet students' varying needs, as it recognizes the spectrum of differences among students, and enables teachers to attend to the specific learning styles of each student, by adjusting what they teach, and how they teach it (Tomlinson, 2003b). At its core, DI is a responsive instructional approach that facilitates students' learning, according not only to their individual abilities, but just as importantly to their interests. Through DI, teachers are able to identify students' starting points, rather than simply starting at the front of a curriculum guide (Tomlinson, 1999).

One of the most widely known and valued models of differentiated instruction was developed by Carol Ann Tomlinson. In Tomlinson's model, teachers adjust the content, process and products of a lesson to improve the likelihood of students' engagement and achievement. Emphasis is placed on demonstrating, scaffolding and lesson design, in order for students to understand and extend their knowledge of the subject. This may be done in a variety of ways, using a wide range of materials, such as visual aids, manipulatives, audio-recordings and

supplementary texts (Tomlinson, 2003b). Teachers may also differentiate the way that students demonstrate their understanding, by designing tiered activities or variations of different products that meet the same learning goals, to allow students the opportunity to choose how to express and display their learning. Through differentiating how students receive new information and how they display their understanding, each student gains access to the curriculum and receives tangible support as they demonstrate knowledge.

Tomlinson (2003b) also advocates that when planning differentiated lessons, teachers should be conscious of students' readiness, interests and learning profiles. In addition, when planning a differentiated curriculum, teachers must consider and respond to students' dynamic needs. As students' learning needs often differ according to particular subjects, or even from day to day, teachers using this model can offer additional support, extend learning or spontaneously adjust the grouping of students, when it is appropriate. As Tomlinson and Eidson (2003) assert, differentiated instruction is like jazz; it is continual improvisation, based on themes and experiences. Taking these factors into account allows teachers to make sure that each student receives, and is able to demonstrate, learning in a way that fosters engagement and meets his or her unique learning needs, thereby increasing the chances of each student achieving success in learning (Tomlinson, 2003)

### **Background and Rationale for Project**

I was drawn to examine DI due to the number of possibilities this instructional approach holds for teaching students of all ages and ability levels. I obtained my Bachelor of Education degree in 2006, so I have had relatively little teaching experience. I sometimes feel daunted by the numerous pressures and expectations to provide quality curriculum and instruction for students who have a multitude of learning needs and interests. I am unsure of how to provide a

rich and interesting curriculum that meets each student's needs, on a consistent basis. My examination of differentiated instruction was also spurred by the concrete model provided by Tomlinson, of not only how to teach students with a variety of needs, but how to do so effectively. In addition, recognition and respect of students' specific needs, interests and contributions to the classroom as a whole is of primary importance in Tomlinson's model.

As a person who has lived with a non-verbal learning disability all my life, I have experienced both positive and negative teaching throughout my academic career that has affected my success as a student and, ultimately, who I am as a person. In situations where I received excellent instruction, my teachers were conscientious and respectful of my learning needs (eg: clear and scaffolded instructions, extra time to complete assignments, and extra support when needed) and did their best to accommodate my needs and incorporate them into their daily teaching practices. I also thrived when I was given options about how to display my understanding of a subject, particularly if I was allowed to demonstrate my knowledge creatively, through writing or drama. For this reason, it is my wish that when I am teaching, I will help my students to thrive by offering them choices in how to demonstrate their knowledge.

In circumstances where I perceived the instruction to be poor, my teachers were unsupportive of my needs. I usually did very poorly in their classes, despite how hard I worked. In these situations, my teachers offered only one type of instruction and did little to accommodate my learning needs, and as a result I was not set up for success in their classes. These negative experiences were very significant to my development as a student, as they made me feel that both my academic performance and I myself were inadequate because I could not do the work that my teachers assigned. Had these teachers differentiated their instruction, and provided me with support through modeling and tiered activities, I likely would have understood

their expectations and succeeded more often in their classes. While I fully acknowledge the limitations of hindsight, I sincerely believe that I would have benefitted from DI in my own educational experiences.

Differentiated instruction is a philosophical approach grounded in the socio-constructivist perspective, and adheres to the belief that optimal learning occurs when students are enabled to create their own meaning, through collaborative learning and sharing their ideas with others. A socio-constructivist view also asserts that students' learning is facilitated when students are challenged in their learning—a belief that is informed by Vygotsky's (1986) theory of the Zone of Proximal Development (ZPD). Vygotsky (1986) posits that instruction should be just beyond students' readiness levels, in order to facilitate academic growth.

I particularly value the acknowledgement of students' strengths, which increases the likelihood of each student to feel valued and competent, thus enhancing self-efficacy. At the same time, the DI model and philosophy increases students' potential for growth, and helps to encourage them to believe in themselves and grow as learners. This strength-based approach juxtaposes the all too common deficit model of teaching, in which students' weaknesses are emphasized. DI is a feasible and practical instructional approach, with high promise of reaching students of all ability levels and backgrounds.

It is important, of course, to note that differentiated instruction is not a new phenomenon. DI has existed in various forms throughout the history of teaching, and was in some aspects a facet of pedagogy in the one-room schools that existed until the early 20<sup>th</sup> century. However, the modern DI approach, as conceived by Carol Ann Tomlinson, emphasizes explicit instruction and predictability, which makes it an effective and current instructional approach in the present day.

### **Why Does DI Make Sense in 2010?**

Over the past few decades, Canadian schools have experienced significant demographic changes in their student population, due in part to an increase of immigrant students and English language learners (ELLs) in Canada (Gérin-Lajoie, 2008). In addition, Canadian classrooms have experienced an increase in students with special needs, due to new inclusion policies by schools that call for the integration of students with disabilities in regular classrooms, whenever possible (Gérin-Lajoie). According to the BC Ministry of Education (2006b), during the 2005-2006 school year, there were a reported 46,915 students with special needs attending school in the British Columbia public school system. This number includes students with learning disabilities, sensory disabilities, behavioural disabilities and students who are gifted (BC Ministry of Education). In addition, while many students with special needs have Individual Education Plans (IEPs) outlining specific accommodations to help these students meet the learning goals, not all students exhibiting signs of learning difficulties are diagnosed as having a special need, or have an IEP, and teachers must determine how to teach such students without specific details or useful support on how to do so.

Another reality facing schools across Canada is the growing number of multi-grade classes (Rushowy, 2007). Often a result of an overpopulation of students in a certain grade, students in two, or sometimes three, grades are merged into a single classroom and teachers must simultaneously teach students who may be functioning at multiple levels and abilities. Teaching students with differing abilities and interests across an array of grades, combined with cultural and ethnic differences and special needs, is a reality that exists in most classrooms across Canada and can be an overwhelming challenge to even the most seasoned teachers that do not know how to meet the varying needs of individual students (Rushowy).

The diversity in abilities and needs among Canadian students is especially evident in language and literacy-dense subjects, as a result of the difference in the pace by which students acquire and develop their literacy abilities (Tobin, 2007). As noted by Singer and Donlan (1989, in Tobin & McInnes, 2007), the reading ability of students in a typical primary classroom may span across 4 or 5 years of reading levels. The diverse nature of students across Canada underscores the need for teachers to change the structure of the school system in a way that includes and benefits all students, particularly students from diverse cultural and linguistic backgrounds and those with special needs (Gérin-Lajoie, 2008). DI provides an effective means of teaching ELLs, and students with special needs, as it allows teachers to attend to the learning needs of all students by appealing to students' differing interests and using varied rates of instruction, as well as varied challenges (Tomlinson & Kalbfleisch, 1998).

A DI approach recognizes that students learn in different ways, at different rates and have different talents and interests. More importantly, differentiated classrooms work better for a full range of students than teaching approaches that adhere to the premise that "one-size-fits-all" (Tomlinson & Kalbfleisch, 1998). As asserted by Tobin (2007), all students need to feel validated about their intellect, language, culture and imagination, and benefit from responsive teaching. This approach develops community, while helping students to feel known, valued and supported by teachers. As stated by Thousand, Villa and Nevin (2007, p. 5) "all students benefit when the general education curriculum becomes more accessible. "

### **An Overview of the Project**

In this project, I offer up for consideration the benefits of using DI as a means of fostering primary-level students' literacy learning. I do this by reviewing the current professional research and literature about DI to demonstrate its importance for teaching students from a

variety of backgrounds and learning needs. I also examine its applications for teaching language and literacy-dense subject areas. In addition, I critically examine Tomlinson's writings about differentiated instruction in order to demonstrate how her ideas for using DI, which are predominantly focused on Grades 4-12, may be applied to primary-level language and literacy instruction. While Tomlinson's body of work regarding DI spans almost two decades, I focus my project on a critical examination of Tomlinson's work within the last fifteen years, in order to narrow the focus of my examination and consider the most recent ideas that are currently relevant. In examining her work I consider the following questions:

1. What theoretical framework underpins Tomlinson's DI model? What educational scholars/theorists does she believe are significant to the development of/theories behind DI?
2. What are the shortcomings and merits of Tomlinson's DI model?
3. Why has Tomlinson's work been so well received?
4. What implications does her work have for using DI to teach primary language and literacy?

To conclude my project, I demonstrate how teachers may apply Tomlinson's ideas to teach primary language and literacy, through designing a professional development workshop that explicates what DI is and how teachers may use it. I also include a two-page exemplar that I have designed, as the basis of the workshop. The significance of the exemplar is to demonstrate the applications of DI in teaching primary-level language and literacy, as well as to underscore the understandings of DI practices in my examination of Tomlinson's writing. The exemplar is intended to serve as a practical resource for teachers wishing to implement DI.

## Chapter 2

### A Review of Professional Literature

The professional literature on the topic of differentiated instruction suggests that DI is a beneficial educational approach for teaching students with a wide range of ability levels and socio-cultural backgrounds (Lawrence-Brown, 2004). In addition, the responsive nature of DI and its possible applications make it an appropriate choice of instruction for language and literacy-dense subject areas, such as Social Studies (Tobin & McInnes, 2007). Also, while the literature discusses the many barriers that exist, which often challenge the successful implementation and use of DI as an instructional approach, advocates of DI still champion differentiated instruction as a worthwhile instructional approach (Tobin & McInnes; Tomlinson, 1999; Holloway, 2000).

This review focuses on literature in three principal areas:

1. The possibilities of DI in addressing the needs of students of all ability levels and backgrounds.
2. The applications of DI to teach language and literacy-dense subject areas.
3. The barriers to implementing DI and suggestions for successful implementation

#### **Differentiated Instruction: A Beneficial Teaching Strategy for Students of Varying Abilities and Backgrounds**

It is widely recognized by educators that today's classrooms are characterized by academic diversity among students (Tomlinson et al., 2003). Among the learners in regular classrooms are students with identified learning problems, ELLs, highly advanced learners, underachievers, students from broadly diverse cultures and economic backgrounds and students who may fit into more than one of these categories (Tomlinson et al.). In addition, it is widely

agreed that the burgeoning discrepancy among students calls for an instructional approach that responds to each students' differences and helps them to achieve success in the classroom (Tomlinson, 1995; Subban, 2006).

In response to the increasing diversity in classrooms, differentiated instruction is considered an essential form of instruction for teaching students from a wide array of backgrounds and ability levels (Cox, 2008). Hoover and Patton (2005) share this view, as they assert that in order to address the cultural and linguistic diversity of students from Kindergarten to Grade 12, all students must have equal access to the curriculum. The authors also posit that against this background, there is a critical need for authentic assessment and differentiation of instruction and curriculum, to effectively teach all students. Tomlinson (1999) also acknowledges the effects of students' backgrounds on their learning, as she asserts that students' gender, culture, experiences, aptitudes, interests and approaches to learning affect how students learn. Thus, a differentiated approach is needed to attend to the unique learning needs of each student.

According to Lawrence-Brown (2004), in differentiated classrooms, all learners have the opportunity to be successful, from students who struggle to gifted learners, since all students are supported and challenged in their work. In a DI approach, the classroom is considered a community, where all students belong and are encouraged as individual learners. Lawrence-Brown also posits that DI is a valuable instructional approach for teachers working with students in inclusive classrooms, as it enables students with special needs to access the curriculum, while being held to high expectations, appropriate to each learner.

Lawrence-Brown (2004) asserts that DI serves two main goals; it provides additional support for learners who find language and literacy challenging, while adapting or extending the

curriculum to meet students' needs. Tomlinson (1999) supports the idea that DI is beneficial for teaching students with a wide range of abilities and needs, and argues that students benefit from instruction that matches their individual readiness levels, interests and learning profiles.

Sternberg and Zhang (2005) concur with Tomlinson's view and assert that children learn well in different ways, and profit most when instruction is differentiated to accommodate their differences. Walpole and McKenna (2007) also acknowledge the positive effect of tailoring instruction to match students' needs, and assert that providing students with what they need, through differentiation, maximizes students' growth.

The importance of attending to students' needs when planning instruction is also supported by a study conducted by Connor, Morrison and Katch (in Walpole and McKenna, 2007), which examined the literacy instruction practices of 42 first-grade teachers, and the effects of the instruction on 108 first-grade students. In the study, researchers observed how varying instruction techniques for students, depending on their needs, impacted students' overall literacy development. The results of the study indicated that students achieved higher academic growth when instruction was matched to their needs. The researchers also found that different students benefitted from different opportunities that matched his or her individual learning needs. These findings support the view that differentiated instruction is a learning approach that serves the needs of all students.

When considering the professional literature regarding the claimed benefits of DI on students' academic success, it should be acknowledged that while many authors acknowledge differentiation as a compelling and effective means of responding to students' diverse abilities, interests and learning profiles, there is a paucity of empirical research that demonstrates the effectiveness of DI as a 'package' (Subban, 2006). While much has been written about the theory

behind DI, there is a gap in the literature regarding the effectiveness of differentiated instruction in practice (Subban, 2006).

As acknowledged in the 2003 Effective Classroom Practices report conducted by the NCAC (Hall, Strangman and Meyer, 2003), the majority of literature discussing the positive effects of DI on students' academic growth is based on classroom examples and testimonials of teachers and experts in the field of differentiation. For example, in a case study conducted by Tomlinson (2003a), a fifth-grade teacher reported that using a DI approach was beneficial in allowing her to teach each of her students in her mixed-ability classroom. In this environment, students were adequately challenged and had a positive learning experience throughout the school year. Another teacher profiled by Tomlinson and Doughty (2005) cited the importance of teaching to students' learning preferences and allowing students to learn in ways that meet their needs, as a way of demonstrating respect for students as individuals.

In addition, many theorists support the idea that teachers should attend to students' interests, in order to spur students' motivation in learning, since students' learning outcomes are greater when students are interested in what they study (Tomlinson, 2004a). Furthermore, many educational researchers argue that students benefit from instruction that responds to their culture and learning style, as it results in improved achievement and a more positive attitude toward learning (Tomlinson, et al., 2003). The topic of the theories behind DI will be further examined in the critical analysis of Tomlinson's differentiation model in Chapter 3.

While further empirical research is needed to explore the effects of DI on students' academic success, it is evident in the professional literature that classrooms are more academically diverse than ever and teachers are in need of an instructional approach that enables them to adequately respond to students' individual needs (Tomlinson et al., 2003). In addition, as

stated by the National Association for the Education of Young Children (in Tomlinson, 2004b), it is the responsibility of schools and educators to adjust instruction to meet the needs of the students they serve, rather than to expect children to adjust to a system that is inattentive to their needs. The literature also makes it clear that differentiated instruction is widely regarded as an instructional strategy that has potential to positively impact students' learning (Hall, Strangman & Meyer, 2003).

### **The Role of DI in Teaching Language and Literacy**

It is widely known that children do not progress equally in terms of acquiring literacy skills. Xue and Meisels (2004) state that not only do literacy abilities vary among individual children, but they may also vary across classrooms and schools. In addition, instructional approaches may affect children with varying abilities and backgrounds in different ways.

Also central to DI is modeling, guiding, coaching, scaffolding instruction—also referred to as responsive instruction— and prompting students to move toward applying literacy strategies independently. Knowles (2009) also advocates the use of DI for teaching reading, because it allows teachers to work with students at their readiness level, and use their interests and learning profiles to choose appropriate books and work assignments. Tobin (2007) suggests the use of leveled texts, vocabulary activities and repeated readings to develop students' fluency. Flexible grouping, which contains a blend of whole-group, small-group and individual instruction, is another important aspect of DI, as is student choice (Tobin).

Guthrie and Davis' study (2003) suggests providing students with choice has a positive effect on their engagement and motivation to read. In the study, Guthrie and Davis examined the reading preferences and practices of all Grade 3, 5 and 8 students in the state of Maryland, via a questionnaire. In the study, the authors found that students' interest in reading diminishes

between Grade 3 and Grade 5, and even further between Grade 5 and Grade 8. This is due in part to a diminished choice of reading material as students progress in grade, ultimately resulting in a loss of engagement in reading. Guthrie and Davis (2003) posit that minimizing students' choice of reading material disengages students from reading, particularly students who find language and literacy learning challenging. Guthrie and Davis' belief concurs with the work of Thames and Reeves-Kazelskis (in Good, 2006) who found that allowing students to choose their own reading material helped to create a positive attitude toward reading, by fostering a strong sense of personal involvement with the text. This belief is also shared by Ryan and Deci (in Walpole and McKenna, 2007) who posit that students, especially those who struggle, require choice to foster their engagement with literacy activities.

Knowles (2009) recommends that when planning a differentiated language curriculum, teachers and librarians should provide students with ample choice of texts to capture students' interests and engagement with reading. Krashen (2008) asserts that children and adolescents are motivated to read when given access to comprehensible and interesting reading material. To facilitate students' choice of reading material, Knowles recommends that teachers set up a library in the classroom, which includes a variety of texts of varying levels and topics. Teachers can also make frequent visits to the school library, to allow students even more choice of reading material. In addition, Knowles suggests that teachers and librarians should help guide students in finding texts that are both engaging and adequately challenging for them to read. As Krashen asserts, providing students with access to reading material results in more reading, whether it is at home, classroom libraries, school libraries or public libraries.

In addition to encouraging students to choose the types or topics of books they read, teachers can also allow students to decide how they access and respond to the text. Teachers can

also use technology to provide students with multiple entry-points into texts, using taped interviews, audio books, websites, CD-ROMs and various forms of assistive technology (Hall, Strangman and Meyer, 2003). Such forms of technology are beneficial for developing students' literacy skills, as they provide rich sources of information and enable ELLs and students who find language and literacy challenging to access the text (Tobin, In Press). Websites and other multimedia learning tools also offer students directed learning opportunities and immediate feedback, making them effective learning tools for students who require additional support.

As suggested by Tobin (In Press), teachers may use learning centres, tiered activities and creative work products to facilitate students' choices in how they learn. Tobin (In Press) also recommends that when designing activities, teachers should provide a menu of work products with varying degrees of complexity, centered around the same key learning objectives, so that all students are working toward the same learning goals in their own way. Teachers may also create work products that are creative, as exploring literacy through the creative arts enables students to gain a deeper understanding of the text (Tobin & McInnes, 2007). Facilitating engagement by allowing learners who find language and literacy challenging to present their understanding creatively, such as through dramatic and artistic representations, empowers students to produce robust representations of their learning (Tobin).

### **Barriers to Implementing DI**

The numerous barriers that challenge the successful implementation of DI in classrooms is a recurring theme that emerged in the examined literature about differentiation. As acknowledged by Tomlinson (2005b), while many teachers recognize that DI and responsive teaching are beneficial to students, they often believe it is not feasible for them to implement this type of instruction in their classrooms. Holloway (2000) concurs with this belief, and identifies

several barriers that teachers often face when initiating a DI curriculum, including minimal planning time, unsupportive administration and a paucity of necessary materials, all which make implementing DI a significant challenge.

Another common barrier to DI is the heavily standardized curriculum, which puts teachers under tremendous pressure to teach to the curriculum, rather than to students' needs (Tomlinson, 2000). One of the most challenging issues facing teachers at present is the need to meet high-stakes accountability standards while addressing the individual needs and strengths of diverse learners (McTighe and Brown, 2005). According to McTighe and Brown (2005), the discord between teaching to the curriculum and meeting students' needs is largely a result of school districts' and educators' responses to the No Child Left Behind Act (NCLB, 2002), as across the United States, state and district efforts to meet the goals of the NCLB have resulted in teaching practices conflicting with requirements for fostering genuine student engagement, understanding, and long-term academic achievement.

Tomlinson and Doubet (2005) concur that many teachers feel as though there is no time to cover anything in classes, other than what is outlined in the curriculum. Indeed, for many teachers, the curriculum has become a prescribed set of academic standards, forcing teachers to 'race against the clock' to cover required material and prepare students for high-stakes tests (Tomlinson, 2000b).

While the majority of literature regarding the conflict between the curriculum standards and students' needs is primarily directed toward the American education system, similar pressures are common in Canada, as teachers must also cover specified material, in order to meet curriculum guidelines and prepare students for provincial standardized tests (Volante, 2004). However, it should be acknowledged that within Canada, the provincial curriculums allow room

for teachers to attend to the learning differences of students, while still conveying the necessary content outlined in the curriculum guidelines.

For example, the British Columbia Language Arts IRP states “when selecting specific topics, activities, and resources to support the implementation of [the curriculum], teachers are encouraged to ensure that these choices support inclusion, equity, and accessibility for all students” (BC Ministry of Education, 2007, p. 12). The BC curriculum also affirms that “most of the Prescribed Learning Outcomes and Suggested Achievement Indicators . . . can be met by all students, including those with special needs and/or ESL needs. Some strategies may require adaptations to ensure that those with special and/or ESL needs can successfully achieve the learning outcomes.” (BC Ministry of Education, p. 12) This suggests that while teachers may certainly feel pressured to adequately cover the material outlined in the curriculum in order to prepare students to complete the standardized tests and ascend to the next grade, teachers may not understand how to balance teaching the curriculum while using DI, and thus simply believe that they cannot do both.

This possibility is acknowledged by Page (2000), who states that the lack of knowledge and expertise in how to use DI often inhibits teachers from attempting to use differentiation as a teaching strategy. As Tomlinson (1995) notes, asking teachers to shift from a one-size-fits-all classroom to a classroom that accommodates the learning needs and styles of academically diverse learners is frightening to many teachers, as it indicates a major change in teaching practices. Many experienced teachers have already developed a collection of lesson plans and activities they believe are successful and effectively teach the curriculum, and thus, are hesitant to begin teaching in a manner that is completely foreign to them (Tomlinson, 2005b). Furthermore, many teachers believe that implementing a new manner of instruction requires a

great deal of effort to put into practice, as they must plan new lessons and adapt their teaching style to accommodate differentiation (Holloway, 2000).

Each of the barriers outlined above present significant challenges to teachers and often inhibits the successful use of differentiated instruction in the classroom. Moreover, such barriers may prevent pre-service teachers, who are trained to use DI during their teacher education training, from using DI once they begin teaching in their own classrooms. Holloway (2000) acknowledges this trend and states that the majority of teachers' use of DI is diminished as a result of their student teaching experiences, and the expectations of pre-service teachers to conform to the teaching style of their supervising teacher. Consequently, very little of the training pre-service teachers receive about DI reaches the classroom of full-time teachers. Tomlinson (1999) shares Holloway's view, as she also found that once pre-service teachers begin teaching they are often pressured to conform to the teaching methods used by other teachers in the school, rather than adhere to instructional approaches learned during their education training.

In addition, Tomlinson (1999) states that when beginning their teaching careers, pre-service and novice teachers were often dissuaded from providing differentiated instruction and instead advised to 'teach to the middle.' Tomlinson (1999) also identifies the limits of teacher-education training as a barrier for DI, as she posits that many teacher education programs do not adequately prepare pre-service teachers for teaching students with a diverse range of needs (Tomlinson et al., 2003). As Tomlinson and her colleagues (2003) assert, pre-service teachers often do not receive sufficient training in using DI, nor is there sufficient emphasis on how to teach students with exceptionalities.

### **Suggestions for Successful Implementation**

Despite the numerous obstacles that exist in schools and classrooms, which challenge the use of DI, advocates of differentiated instruction fervently believe that DI is a worthwhile teaching approach that is essential for accomplishing successful learning in heterogeneous classrooms and the results of DI on students' performance and academic achievement are worth the effort (Tomlinson, 1999; George, 2005; Tobin & McInnes, 2007). However, as acknowledged by George (2005), every educator knows how hard it is to change the way one teaches, and moving from total reliance on whole-class instruction to effectively differentiating instruction will require more than wishful thinking or traditional staff development. So, how can teachers overcome the barriers to DI, in order to successfully implement a differentiated curriculum in their classrooms?

Tomlinson (1999) recommends that teachers should start small when beginning the differentiation process. Tomlinson (1999) also suggests that rather than attempting to differentiate everything at once, which will inevitably lead to frustration and failure, teachers should focus on a few things to differentiate well. For example, teachers may choose to create one differentiated lesson for every unit they teach. Teachers can also begin to differentiate by offering students more choices in their learning; such as by allowing students to choose reading materials and work products that suit their abilities and interests (Tomlinson).

Tomlinson (1999) also encourages teachers to reflect on the strategies they try and consider how well they worked, as well as how they may be improved. If teachers make an effort to pay attention to students' learning styles and interests when planning lessons, and develop differentiated routines and procedures in a methodical and conscientious way, differentiation will become a way of life.

Tobin and McInnes (2007) emphasize that teachers interested in implementing differentiated instruction require information and reflective coaching from experienced professionals, to help teachers understand the fundamental principles related to DI. Tomlinson (1995) also notes that teachers new to differentiation often ask for a 'recipe' for DI. Tomlinson (1995) responds that while there is no one right way to differentiate, as all students have different needs and interests, and thus require different strategies, teachers would benefit from coaching about issues that are integral to creating a successful differentiated classroom. Such coaching may include topics such as classroom management, organization and specific differentiation strategies that teachers can implement in their own classrooms. Tomlinson (1995) also advocates using videos to help teachers understand how to differentiate that clearly demonstrate to teachers how they can have different groups of students working in varying ways on the same topic. Forming DI support groups to guide each other through the differentiation process and offering additional support to each other, following professional development training, is critical to success (Tobin and McInnes, 2007).

In a study conducted by Tobin and McInnes (2007) (which profiles a series of three professional development workshops, in which 13 teachers received instruction and coaching on how to use DI to teach the Language Arts), teachers were offered materials and strategies to use when differentiating. Following the workshops, Tobin and McInnes reported that providing the educators with professional development training about DI led to a greater overall awareness of what differentiated instruction was, as well as how it may be used to teach language and literacy. However, the researchers also found that additional coaching and instruction would have been beneficial in further developing the teachers' understanding of the possible applications of DI.

Holloway (2000) advocates for teacher education programs to provide pre-service

teachers with a comprehensive understanding of the tenets of differentiated instruction. In addition, pre-service teachers' education in DI ideally should be validated by their teaching experiences during their practicums and subsequent full-time employment.

In summary, the professional literature about DI supports the view that differentiated instruction is widely considered to be an effective instructional approach for students of all ages and backgrounds. Furthermore, as DI is responsive to students' individual needs and holds many possible applications for teaching, it is a favourable approach for teaching language and literacy-dense subject areas. Finally, although many challenges exist which hinder teachers' ability to put DI into practice, it is a worthwhile instructional approach that warrants teachers' best efforts.

The following chapter includes my rationale for examining Tomlinson's work as a focus for this project, and provides a critical examination of Tomlinson's writing about DI. Essentially, my paper is focused on the following inquiry question: In what ways may the work of Carol Ann Tomlinson in differentiated instruction be applied to the teaching of language and literacy at the primary level?

## **Chapter 3**

### **Rationale for Selecting Carol Ann Tomlinson**

I selected the work of Carol Ann Tomlinson as the focus for my project, because many in the educational realm regard her as a preeminent scholar on the subject of differentiated instruction. With more than 20 years of professional teaching experience, and over 150 publications about DI, including books, professional practice and scholarly articles, Tomlinson is widely considered to be "the voice" of Differentiated Instruction (Bafile, 2009).

Tomlinson's writing is extremely pragmatic, and yet grounded in a theoretical approach

that is heavily socio-constructivist. She makes the subject of differentiated instruction accessible to educators, particularly those who were previously unaware of DI and the possibilities it holds for teaching a diverse group of students in real classrooms. Tomlinson clearly explains exactly what DI is, and demonstrates how it can be used to teach students of all ages and ability levels, including English language learners, gifted students and students with special needs. In addition, in many of her publications, Tomlinson supports her suggestions for implementation with examples of teachers who have used differentiated instruction in their own classrooms and explicates how DI was used.

Tomlinson's work is significant to the study of differentiated instruction, as her professional experience as an educator and the way that she conceptualizes DI has led to a breakthrough in teachers' awareness of differentiation and its possibilities for educating students of all abilities and age levels, in regular classrooms. In addition, Tomlinson's numerous publications offer teachers insight about the purpose and philosophy behind differentiated instruction and how they may use it in their own teaching.

Tomlinson's work appealed to me, due to its practical nature and the numerous examples she provides about what differentiated instruction may look like and how it may be applied to teaching students of all ages and learning needs. Tomlinson's writing is extremely clear and accessible to readers, which I believe is a major strength in her work. As a teacher interested in learning how to differentiate effectively, Tomlinson's work provides a straightforward and comprehensive approach that is grounded in a socio-constructivist perspective, which I value. In addition, after reading and analyzing Tomlinson's work, I feel that I can successfully implement DI in my own classroom with an appropriate measure of confidence.

## Methodology

In conceiving this project, I had originally planned to examine the development of Tomlinson's ideas about differentiation, by considering her early conceptions of differentiated instruction and how they evolved into her present view of DI in 2010. My plan shifted, however, after reading through Tomlinson's work; I realized that her work focused more on refining her original conceptualization of DI and conducting action research with teachers to refine and extend her model to a number of disciplines. In order to gain a sense of Tomlinson's ideas about teaching and her conceptualization of differentiated instruction, I examined 25 books and scholarly articles, written by Tomlinson about differentiation. In addition, I read approximately a dozen scholarly articles about differentiated instruction, which provided a broader perspective on the philosophy and implications of using this model. I consulted such journals as *Theory into Practice*, *Language and Literacy*, and *Literacy* (for a complete list of scholarly publications which I examined, see Appendix A). Furthermore, in order to gain additional insight into Tomlinson's conceptualization of DI, I personally emailed Tomlinson to ask her several questions about her view of differentiation and its significance as an instructional approach, to which she replied (for the personal communication between Tomlinson and myself, see Appendix B).

While it is clear from reading several of Tomlinson's earlier publications that using differentiated instruction to teach students of all abilities had its genesis in gifted education (Tomlinson and Callahan, 1992), Tomlinson's conceptualization of differentiation as a teaching approach undergoes very little transformation, from her earliest writing about differentiation to her most recent. Tomlinson's later publications do demonstrate a more thorough articulation and explication of DI, however the tenets and fundamental philosophy that underpins her DI model

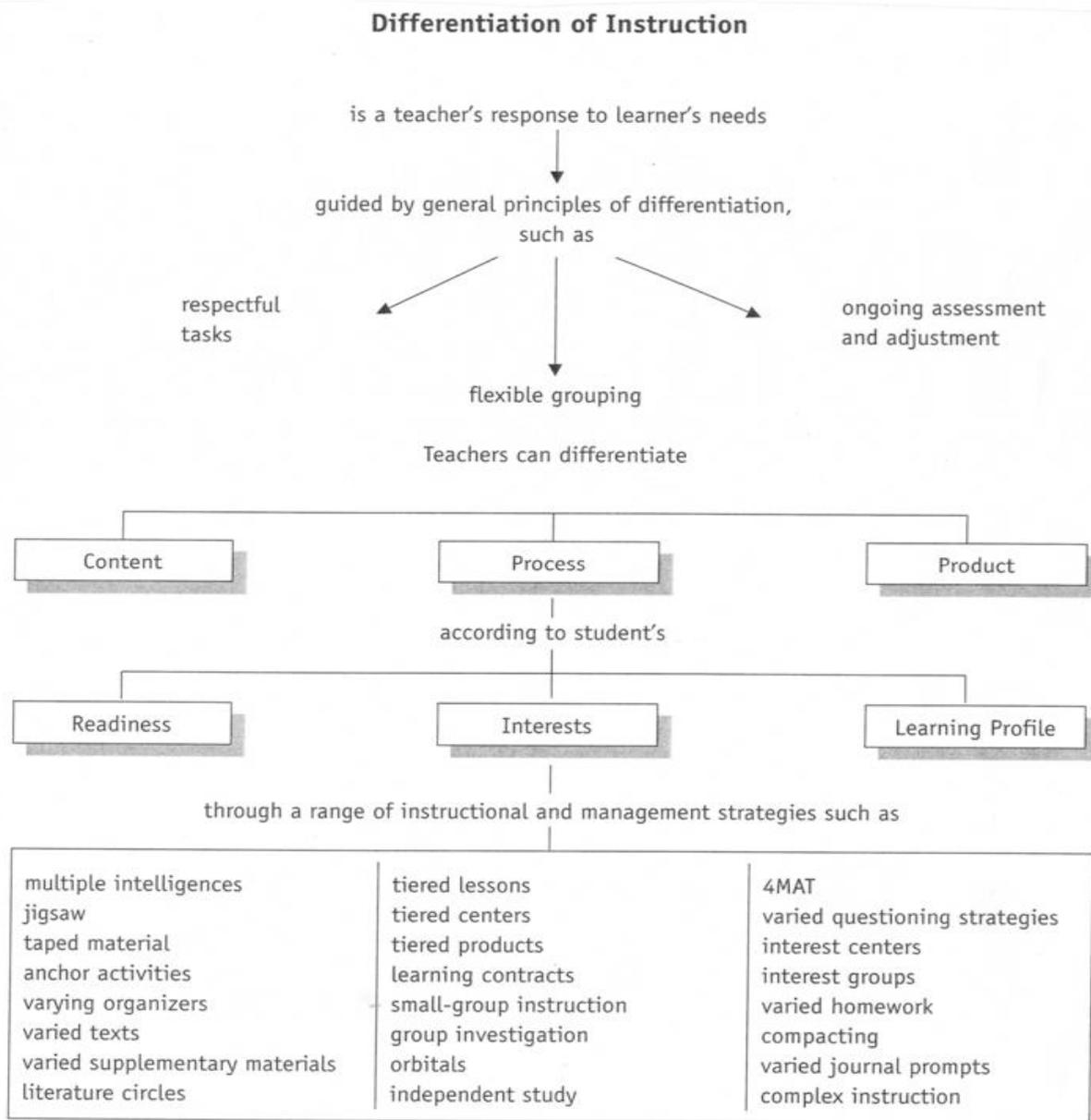
are primarily the same throughout her body of work. The majority of Tomlinson's work focuses on teaching middle and secondary school students, with little attention paid to primary students. For this reason, I elected instead to focus my project on a critical analysis of Tomlinson's writing about DI, and an adaptation of Tomlinson's model of differentiation for teaching primary-level language and literacy-based subject areas. As a pre-service teacher interested in teaching students in primary grades, I see the value in adapting Tomlinson's model to attend to the needs of primary students, from Kindergarten to Grade 4.

### **A Critical Examination of C.A. Tomlinson's Writing About Differentiation**

In order to offer readers a more thorough understanding of the context of Tomlinson's central work, I have included a graphical representation of Tomlinson's DI model (see Figure 1 below), as well as provided a written description of Tomlinson's conceptualization of differentiation.

Figure 1.

### DI Concept Map



From: Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.

According to Tomlinson's DI model, all students vary in three fundamental ways: their readiness, interests and learning profiles. Tomlinson (1999) posits that these factors are important for teachers to recognize when providing instruction, as they influence how students make sense of new information. Students' readiness is defined by their natural ability to make sense of new information. Students with less developed readiness levels require additional support to foster their understanding and fill in knowledge gaps, while advanced students need extension via more complex activities that facilitate deeper learning (Tomlinson, 2003b).

Teachers may also differentiate for students based on their interests or curiosity about certain topics (Tomlinson, 2003b). Considering students' interests is a critical factor in engaging students in what they are learning, as students' enjoyment of a topic helps to foster and sustain their motivation for learning, particularly if the content or task is otherwise challenging for them.

A third way that teachers may differentiate instruction is based on students' specific learning profiles, which takes into account the way that students learn best (Tomlinson, 2003b). Learning profiles are comprised of a myriad of factors that influence students' learning preferences, such as group-work or independent settings, noise level, and the way that students prefer to present their understanding of the subject, such as through writing, speaking or artistic representation. Students' learning profiles may be influenced by age, gender and cultural factors, however as each student is unique, their learning profile is also unique; teachers must understand that what works for one student may not necessarily work for another. In order to differentiate instruction for students with a variety of interests and learning needs, Tomlinson (1999) posits that teachers must adapt the curricular elements, content, process and products, according to students' readiness, interests and learning profiles.

When differentiating the content in a lesson, teachers adjust the curriculum to match

students' ability levels. Differentiating content allows teachers to increase or decrease the complexity of the curriculum, in relation to students' understanding of the subject (Tomlinson, 2003b). It is important to note, however, students are required to meet certain learning goals in each grade, thus adjustments to the content itself are usually minimal, unless absolutely necessary (ie: if the content is far too easy or too difficult for students to grasp). Teachers may also differentiate the content by adjusting the means through which students gain access to the information, by using visual aids, manipulatives, audio-recordings and additional texts.

Teachers may also differentiate instruction through the process. In the process, students draw on key skills to make sense of the central ideas of the lesson, such as activities and short assignments that allow students the opportunity to make sense of what they have learned (Tomlinson, 2003b). When differentiating the process, teachers adjust the means through which students make sense of the information, according to students' learning needs and abilities. Teachers can differentiate the process through learning centres or manipulatives to allow students the opportunity to choose how to make sense of their newly acquired knowledge (Tomlinson, 2003b).

The final way that teachers may differentiate instruction is through the product. The product of a lesson is a vehicle through which students demonstrate their knowledge and understanding of the information, such as assignments, projects or tests (Tomlinson, 1999). Typically products are larger pieces of work than the activities completed during the process. Students usually begin working on products at the end of a unit or a significant segment of learning, to demonstrate the knowledge they attained or skills they learned over the course of the unit (Tomlinson, 2003b).

When differentiating instruction, teachers must also take several other factors into

account, such as grouping arrangements, materials and time (Tomlinson & Eidson, 2003). Teachers are encouraged to consider how they might arrange the class to provide optimal learning for each student. As some students may work or learn better in groups, and other students work best individually, teachers will need to take such circumstances into consideration during planning. An additional consideration involves the material selection, which will enable students to best make sense of, and demonstrate their understanding of, new ideas, as well as jagged timeframes, as some student may require more time to complete activities than others (Tomlinson & Eidson).

It is also important to note that many students' needs may vary according to the subject or topic; a student that requires additional support in one area may not need it for another (Lawrence-Brown, 2004). Furthermore, some students may work better in groups for some assignments, and work better independently during others. In addition, some students may need extra time to complete certain activities, but not others. As these factors vary, depending on students' needs, teachers must be flexible and adapt each aspect to support the learning needs of individual students as required.

### **The Theoretical Framework Underpinning Tomlinson's DI Model**

Tomlinson's model of DI is heavily grounded in the educational theory and research, which advocates responsive teaching that attends to students' variance in readiness, interests and learning profiles. Throughout her work, Tomlinson references the research and ideas of many notable scholars to provide support for DI. For example, Tomlinson's belief that each learner is a unique individual with their own unique needs and background is supported by the theory of social constructivism, promoted by educational scholars such as Vygotsky and Bandura,

In her writing, Tomlinson acknowledges Vygotsky's belief that social and cultural

contexts play a significant role in how students derive meaning from text or pictures. Tomlinson emphasizes Vygotsky's belief that in order for students to deepen their understanding of new ideas and develop higher order thinking, they must be allowed to discuss their learning in collaborative groups (Tobin, In Press). Bandura's Social Learning Theory also supports the use of grouping to help students' achieve meaning. According to Bandura (1977), students learn from one another, through observation, imitation, and modeling. Thus, through working together in groups, students help each other to create meaning and foster their understanding of new ideas.

Tomlinson's DI model also advocates the use of collaborative grouping as a means of helping students to make sense of new ideas through meaningful discussion. Tomlinson posits that allowing students to discuss their ideas and interpretations of text is beneficial for fostering students' understanding of new ideas, as students are able to make sense of and share their individual perspectives on various issues, while gaining differing insights from their peers.

Tomlinson's DI model is also supported by research and theories that advocate that instruction should be responsive to students' individual readiness levels. The most notable of these theories is Vygotsky's theory of the Zone of Proximal Development (ZPD), which posits that instruction should be just above students' readiness level, to present a challenge that will encourage students to grow in their learning (Vygotsky, 1986). According to Vygotsky (1986), the ZPD is an area of learning that exists between students' current ability level and their potential ability level. When working in the ZPD, students will likely be significantly challenged and achieve deeper learning. The belief underlying Vygotsky's theory is what students can do today with help, they can do independently tomorrow. Consequently, in order to enable students to achieve success when working in their ZPD, Vygotsky (1986) asserts that teachers should

provide modeling, scaffolded instruction and constant support to help students progress in their learning, which are also tenets of Tomlinson's DI model.

Tomlinson's (1995) work encompasses the theory of the ZDP, as she advocates for teachers to "teach up" when differentiating, meaning that instruction should always be slightly above students' readiness levels to encourage development and learning and to make engagement more likely. Tomlinson's belief that instruction must challenge students in order to engage them in their learning is also concurrent with the view of Byrnes (in Tomlinson & Allan, 2003), who argues that instruction should always be in advance of students' ability level, in order to facilitate growth.

Learning is more rewarding for students when it relates to their interests (Tomlinson & Allan, 2003). The research of Csikszentmihalyi (1990) also supports the idea that attending to students' interests has a positive effect on achievement, as it leads to students' enjoyment of learning tasks. In his work, Csikszentmihalyi presents the idea of 'flow,' and its effect on students' motivation. According to the author, flow is a state of complete absorption that students experience when thoroughly engaged in their work. Csikszentmihalyi also asserts that appealing to students' interests is a key factor in achieving flow, as it encourages students to stay engaged in their work, despite the challenge that the activity may present.

Tomlinson's DI model is congruent with Csikszentmihalyi's (1990) beliefs about flow, as the authors posit that in order for flow to occur, the activity must be at students' readiness level and the instructions or goals of the task must be clear for students, which are both tenets of Tomlinson's model. Tomlinson (1999) also believes that teachers should offer students choice whenever possible, such as in reading materials and learning products, to appeal to students' interests and encourage students' engagement in their work.

Finally, Tomlinson's assertion of the need to attend to students' learning profiles (Tomlinson & Eidson, 2003) is supported by the opinions of scholars and educators, who recognize how students' learning preferences and backgrounds affect their ability to learn. One notable philosophy that supports the importance of considering students' learning profiles is Gardner's theory of 'multiple intelligences.' In his theory, Gardner (1999) proposes that all individuals vary in strengths and weakness, according to eight intelligences: verbal-linguistic, visual-spatial, logical-mathematical, musical-rhythmic, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist. Gardner (1999) also asserts the importance for teachers to take students' intelligences into account when planning instruction, and teach in a way that attends to all intelligences, to ensure that each student is able to learn in a way that capitalizes on his or her strengths.

In addition, Tomlinson's position that students' learning profiles are influenced by their culture and background is supported by research and theory, as demonstrated by the work of Lisa Delpit (1995). According to Delpit (1995), many students enter school with their own linguistic codes learned at home, which may conflict with the register of language used at school, particularly if the predominant culture at school differs from students' culture at home. For example, students from a Japanese background may experience difficulty with an assignment that asks students to deliver a speech that reiterates information, as in Japanese culture it is considered offensive to repeat information the audience already knows (Delpit). In North America, students from non-Caucasian backgrounds often struggle to adapt to the language and customs common to Caucasian-dominant schools; while the majority of learning tasks may be clear to most students, students from differing cultures may feel as though they must compromise their cultures and values in order to succeed in school (Delpit).

In accordance with Delpit's (1995) stance, research conducted by Sternberg, Torff and Grigorenko (1998) reveals that students consistently achieve better when instruction attends to students' backgrounds, by matching their learning profiles. Sternberg and his colleagues (Sternberg & Zhang, 2005; Sternberg, et al., 1998) also found that teaching students using a multiple-intelligence approach led to improved academic performance, compared to students taught via a traditional, single-approach format. Sternberg and his colleagues' findings are in concurrence with Ginsberg's (2005) view, as she asserts that having an awareness of, and respect for, students' cultural diversity influences their motivation to learn. Ginsberg (2005) also states that to facilitate the motivation of all students, it is imperative for teachers to address fundamental knowledge and skills within a culturally responsive, and intrinsically motivating, curriculum.

The opinions of the authors in the examined research underscore the importance for teachers to take students' learning profiles into account when planning instruction, in order to allow students to reach their potential, and ensure that students of varying cultures and backgrounds can consistently find learning tasks that correspond to their preferred style of learning (Sternberg & Zhang, 2005; Tomlinson & Allan, 2000). Teachers can recognize students' learning profiles in a variety of ways when differentiating, such as by varying the process and providing a menu of work products, to allow students multiple avenues of learning (Tomlinson, 2000b).

However, Sternberg and Zhang (2005) also offer one cautionary piece of advice for differentiating according to students' learning profiles. The authors advocate that teachers should not match students' learning preferences to learning tasks 100 per cent of the time, as they believe that students must learn that in life they will not always have a perfect match to their

preferred way of doing things. Therefore, while it is important that teachers attend to students' learning preferences, by providing students with opportunities to learn in the way that best suits their learning needs, teachers must also teach students to be flexible and learn in other ways, to develop students' potential growth (Sternberg & Zhang, 2005).

In addition to providing support for DI via a wide array of theory and research, Tomlinson (2005a) offers examples from her own experiences as both a student and teacher, to support her opinion that differentiation positively influences students' academic success. In her work, Tomlinson (2005a) recounts her experience in middle school with a teacher who did not recognize students' differences in her instruction, and the detrimental effect this experience had on Tomlinson's learning and self-esteem. Tomlinson (2005a) juxtaposes this example by outlining her experience with a teacher who did use differentiation and student-focused teaching, and the positive impact this instruction had on her learning and sense of self-efficacy. Tomlinson's belief that differentiation is an important instructional approach is also supported by her experiences as a classroom teacher with students who had a wide variety of learning needs. Due to the varying needs of her students Tomlinson realized that she could not reach them by teaching all her students in the same way, and thus turned to differentiation to attend to her students' differences as (C. A. Tomlinson, personal communication, February 12, 2010). Tomlinson's personal examples of the importance of instruction that responds to students' differences lend further credibility to her assertion that teachers need to provide students with differentiated instruction that recognizes each student for his and her unique learning needs.

### **Criticisms of Tomlinson's DI Model**

While Tomlinson's DI model possesses many strengths that will be later explored in further detail, it does have some limitations and areas of weakness that should be considered as

well. First, as asserted by Subban (2006), there currently exists little empirical evidence to support the effectiveness of differentiation as a whole model. As previously mentioned in the Literature Review contained in Chapter Two (see p. 8), as well as the section “Theoretical Underpinnings of Differentiation” in this chapter (see p. 27), whereas there is much research to support the efficacy of responding to students’ differences through instruction based on their readiness, interests or learning profiles as separate elements, few studies examine the effectiveness of differentiation instruction as articulated by Tomlinson’s model.

There is extensive support in the professional literature about the need for further research and the exceptional promise of Tomlinson’s DI model demonstrates the consensus among educators that DI is widely considered to be a beneficial form of instruction for students of varying abilities and backgrounds (Tomlinson & Allan, 2000; Tobin, In Press). However, as Tomlinson and her colleagues recognize (Tomlinson et al., 2003; Tomlinson & Allan, 2000), additional research is needed to understand the complexities and implications of DI, both positive and negative, particularly in terms of teachers’ abilities to implement a differentiated approach. It should also be investigated if varying the individual elements of differentiation (readiness, interest and learning profiles) affects the overall learning outcomes for students. In addition, further research is needed to establish which models of instruction best help learners with a variety of needs (Tomlinson et al., 2003). Having solid research that demonstrates the effects of DI on students’ learning would lend additional support to teachers’ recognition of differentiation as an effective educational strategy.

Another facet of Tomlinson’s work that may be perceived as a shortcoming is her dominance in the field of differentiated instruction. Since the majority of literature about DI has been written by Tomlinson (see Appendix A), and her ideas have been heavily cited in the works

of others (Knowles, 2009; Tobin, In Press; 2007; Lawrence-Brown, 2004), Tomlinson's viewpoint forms the basis of much of the available literature about differentiation, and thus it is difficult to contrast her model with those of other researchers (Good, 2006). In addition, Tomlinson further substantiates her dominance in the field of DI by frequently citing her previous work in her writing, to support her arguments regarding differentiation. While Tomlinson's extensive knowledge and experience lend much credibility to her work, as well as her position that differentiation is a beneficial form of instruction, the field of differentiation would benefit from multiple viewpoints about DI to provide educators with a comprehensive and unbiased view of the efficacy of differentiated instruction (Good, 2006).

#### **Merits of Tomlinson's DI Model**

Despite the limited empirical research, Tomlinson's work also has many strengths that cause her to be highly regarded among educators as the 'voice' of differentiation (Bafile, 2009; Knowles 2009). First, Tomlinson's model of differentiation is based on her experiences as an educator and program administrator of special services for struggling and advanced learners. As Tomlinson has garnered over 20 years of classroom practice and experience working with students of varying ages and abilities, she has developed a keen understanding of students' learning needs (Bafile, 2009). Tomlinson's model of DI is also rooted in educational theory and research, such as social constructivism and multiple intelligences. The numerous educational theories and research that Tomlinson cites in her work, including the work of Vygotsky (1986), Bandura (1977), Gardner (1999), Sternberg and Zhang (1998), Sternberg et al. (2005), and Erickson (1998), support Tomlinson's position that differentiation is a beneficial form of instruction that recognizes and responds to the many differences in students' readiness, interests and learning profiles.

Another strength of Tomlinson's work is her straightforward and pragmatic approach to differentiation. As the majority of Tomlinson's books and articles are directed toward educators, particularly those with little or no experience differentiating, Tomlinson's body of work makes both a strong case for the need for differentiated instruction, as well as outlines how teachers can implement DI in their classrooms (Tomlinson, 2000a). In order to allow DI to seem achievable for teachers, Tomlinson breaks down the principles and characteristics of DI (ie: differentiating by content, process and product according to students' readiness, interests and learning profiles; using ongoing assessment and flexible grouping, etc) in a way that instils a sense of confidence in teachers that they can successfully attend to students' varying needs through DI.

In her work, Tomlinson also identifies potential barriers that might inhibit teachers from differentiating, as well as offers strategies for teachers new to the differentiation process to help them overcome such obstacles. For example, Tomlinson advocates that when implementing a differentiated curriculum, teachers should begin slowly, use flexible grouping, and focus on the core concepts or 'big ideas' they want students to learn (Tomlinson 1995; Tomlinson et al., 2003; Tomlinson, 2005a).

A further strength of Tomlinson's work about DI is that it appeals to her audience's conscience, by humanizing the need for differentiation. In her work, Tomlinson often profiles students with a variety of learning needs, who would benefit from differentiated instruction, in order to demonstrate that DI is an effective form of instruction for teaching students of all abilities and backgrounds. To illustrate this point, in her article *Grading for Success*, Tomlinson (2001) describes the differing learning needs among three students, Xavier, Philip and Anda. Xavier is an English Language Learner who struggles to understand the teacher's instructions, while Philip has significant learning problems and difficulty focusing on learning tasks for long

periods of time and Anda is an advanced learner who needs to be further challenged (Tomlinson, 2001). Tomlinson posits that teachers will encounter students with varying needs such as Xavier, Philip and Anda in typical, mixed-ability classrooms, and thus, must see school through students' eyes to understand how to effectively teach them (Tomlinson, 2001). Tomlinson's tendency to put a face on students' learning needs is extremely powerful, as it underscores the importance of trust in the learning relationship between teachers and students.

Tomlinson also personalizes her writing about differentiation by providing case studies of teachers using DI and outlining how it was used, to offer examples to her readers of how they may implement differentiation in their own classrooms. For example, in her books, *The Differentiated Classroom: Responding to the Needs of All Learners* (1999) and *How to Differentiate Instruction in Mixed-Ability Classrooms* (1995), Tomlinson profiles teachers of different subjects and outlines the various ways they use DI to teach students across all grade levels. In her case studies, Tomlinson also shows how the outlined instruction fulfills the principles of differentiation, as well as how it helps students to develop their learning abilities. These case studies are helpful to teachers who are new to differentiated instruction. While Tomlinson repeatedly asserts there is no recipe for differentiation, these examples demonstrate that differentiation can be used in a variety of ways to teach students of all levels (Tomlinson, 1995).

### **Why Tomlinson's Work Has Been So Well Received**

The many strengths of Tomlinson's model of DI, such as its strong roots in educational theory and research, its clear and pragmatic approach to teaching, as well as the personal examples Tomlinson provides to help her audience better understand who differentiation helps and how can be used, offer insight into why Tomlinson is widely recognized as an expert on the

subject of differentiated instruction and why her work has been so well received among educators.

Tomlinson's extensive professional career in the field of education lends additional credit to her prolific status in the field of differentiated instruction (Tomlinson, 2009). Presently, Tomlinson is the Chair of Educational Leadership, Foundations, and Policy at the University of Virginia's Curry School of Education, as well as the co-director of the university's Institutes on Academic Diversity (Tomlinson, 2009). Tomlinson has also received several awards for her contributions to education, as she was named Virginia's Teacher of the Year in 1974, Outstanding Professor at the Curry School of Education in 2004 and received an All-University Teaching Award in 2008 (Tomlinson, 2009).

Further evidence of the positive reception Tomlinson has garnered is demonstrated by the ASCD's recognition and support of Tomlinson's work. Tomlinson has a long-standing professional relationship with the ASCD; she has written several books about differentiation in partnership with the ASCD, which have been translated into multiple languages, as well as served as consultant for, and appeared in, 12 videos for the organization (ASCD, 2010). Readers are also able to purchase Tomlinson's work through the ASCD website (ASCD).

In addition to being recognized by the ASCD, Tomlinson's ideas about differentiation and instructional strategies are cited in numerous publications about education, by a wide array of authors. For example, entering Tomlinson's name into Google generates 157,000 different results. In addition, Tomlinson was frequently cited throughout many of the professional articles examined for this dissertation, by authors such as Lawrence-Brown (2004), George (2005), Ginsberg (2005), McTighe and Brown (2005), Knowles (2007), and Tobin (2007). Tomlinson's wide-spread recognition by fellow researchers and educators offers additional credit to the

significance of Tomlinson's work, and further solidifies Tomlinson's status as an authority in the field of differentiated instruction.

Furthermore, although Tomlinson has personally conducted few studies that demonstrate the effectiveness of DI, she has made a significant contribution to the field of education, by bringing to light the importance of attending to students' varying needs through responsive instruction. While the roots of differentiation can be traced back to the teaching process commonly used in one-room school houses, present-day classrooms are more academically and culturally diverse than ever before and teachers are grappling with how to sufficiently respond to the diverse range of needs that exist among students (Tomlinson, 2005b; Bafile, 2009). Tomlinson's writing has been published in a time in which there is a high need and ideological commitment to instructional approach that responds to students' varying needs, causing her DI model to be regarded as a valuable resource for teaching students in the 21<sup>st</sup> century.

### **Implications for Language and Literacy Instruction at the Primary Level**

While Tomlinson's model of differentiation primarily focuses on teaching students at the middle-school level, implications for teaching primary students can also be readily extracted from her work. Since the principles of DI are fundamentally the same for teaching students of all ages, educators can take activities originally designed for teaching one age group and, with few, but important modifications that address young learners' literacy development, use it to teach another. As a teacher interested in teaching students at the primary level, I recognized the void that exists in differentiation activities for primary students and, in response, I adapted one of Tomlinson's best differentiation tools, *Think-Tac-Toe*, to create a tool for teaching primary language and literacy. The original learning tool was designed as an alternative to book reports at the middle school level and is featured in Tomlinson's book, *Fulfilling the Promise of the*

*Differentiated Classroom* (2003).

Figures 2 and 3 show the original instructional tool, which advances in difficulty level from “Version 1” to “Version 2.” Figures 4 and 5 show the newly adapted version of *Think-Tac-Toe*, modified for the primary level, which also increases in difficulty between “Version 1” and “Version 2.”

**Figure 2.**

### **Novel Think-Tac -Toe: Middle School (Version 1)**

**Directions:** Select and complete one activity from each horizontal row to help you and others think about your novel. Remember to make your work:

- thoughtful.   •rich with detail.   •original.   •accurate.

<b>Character</b>	Make a pair of collages that compare you and a character in your book in physical and personality traits. Label your collages generously, so viewers understand your thinking.	Write a bio-poem about yourself and another about a main character in the book so your readers can see how you and the character are alike and different. Be sure to include the most important traits in each poem.	Write a recipe or set of directions for how you would solve a problem in your life and another for how a main character in your book would solve a problem. Your list should help us know you and the character better.
<b>Setting</b>	Draw or paint and write a greeting card that invites us into the scenery and mood of an important part of the book. Be sure the verse helps us understand what is important in the scene and why.	Make a model or a map of a key place in your life and of an important place in the novel. Find a way to help viewers understand both what the places are like and why they are important in your life and the character’s life.	Make two timelines. The first should illustrate and describe at least six to eight shifts in setting in the book. The second should illustrate and explain how the mood changes with the changes in the setting.

<b>Theme</b>	Using books of proverbs and quotations, find at least six to eight that you feel reflect what is important about the novel's theme. Find at least six to eight that do the same for your life. Display and explain your choices.	Interview a key character from the book to find out what lesson she thinks we should learn from the events in the book. Use a question-and-answer format to present your material. Be sure the interview is meaningful.	Find songs you think reflect an important message from the book. Prepare an audio collage. Write an accompanying card that helps listeners understand why and how you think the songs express the book's meaning. Do the same thing with your life and its themes.
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Figure 3.

**Novel Think-Tac-Toe: Middle School  
(Version 2)**

**Directions:** Select and complete one activity from each horizontal row to help you and others think about your novel. Remember to make your work:

- insightful.    •rich with detail.    •accurate.    • vivid in imagery and wording.

<b>Character</b>	Write a bio-poem about yourself and another about a main character in the book so your readers can see how you and the character are alike and different. Be sure to include the most important traits in each poem.	A character in the book is being written about in the paper 20 years after the novel ends. Write the piece. Where has life taken him? Why? Now do the same for yourself 20 years from now. Make sure both pieces are interesting, feature-type pieces.	You're a " profiler." Write and illustrate a full and useful profile on an interesting character from the book with emphasis on personality traits and mode of operating. While you're at it, profile yourself too.
<b>Setting</b>	Research a town or place you feel is equivalent to the one in which the novel is set. Use maps, sketches, and population and other demographic data to help you draw comparisons and contrasts.	Make a model or a map of a key place in your life and of an important place in the novel. Find a way to help viewers understand both what the places are like and why they are important in your life and the character's life.	The time and place in which people find themselves and in which events happen shape those people and events in important ways. Find a way to convincingly prove that idea using the book—and your own life.
<b>Theme</b>	Find out about famous people in history or current events whose experiences and lives reflect the essential themes of your novel. Show us what you've learned.	Create a multimedia presentation that fully explores a key theme from the novel. Use at least three media (for example, music, painting, poetry, sculpture, photography and calligraphy) in your exploration. Draw at least two comparisons or contrasts between themes in your life and in the novel.	Find several songs you think reflect an important message from the book. Prepare an audio collage. Write an accompanying card that helps listeners understand why and how you think the songs express the book's meaning. Do the same thing with your life and its themes.

Adapted from: Tomlinson, C. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, VA: Association for Supervision and Curriculum Development, by Christina Erickson (2010).

Figure 4.

### Story Think-Tac-Toe: Primary (Version 1)

**Directions:** Choose 1 “**Character**,” 1 “**Setting**” and 1 “**Theme**” activity from each row, to help you and others think about your story. Talk to at least one other person about your chosen activity before you begin. Make sure that your work is:

- interesting.
- full of details.
- imaginative

<b>Character</b>	<p>Draw or paint <b>2</b> pictures:</p> <ol style="list-style-type: none"> <li>1) One of <b>you</b></li> <li>2) One of a <b>character</b> in your book.</li> </ol> <p>In the pictures, show:</p> <ul style="list-style-type: none"> <li>* What is the <b>same</b> and</li> <li>* What is <b>different</b></li> </ul> <p>in how you and the character <b>look</b> and <b>act</b>. Use <b>lots of labels</b> so viewers understand your thinking.</p>	<p>Make a comparison chart about yourself and a character in the book. Divide the chart into 4 sections.</p> <ol style="list-style-type: none"> <li>1) In the first two sections, explain how you and the character are the <b>same</b>.</li> <li>2) In the other two sections, explain how you and the character are <b>different</b>.</li> </ol> <p>Be sure to include the <b>most important characteristics</b> in each chart.</p>	<p>Choose a problem that happened in the story.</p> <p><b>Explain the problem</b> and <b>how the main character solved the problem</b> in the story.</p> <p><b>Explain how you would have solved the problem</b>, if you were in the story. Do you think your solution would have worked better than the solution the character used in the story? Explain why or why not.</p>
<b>Setting</b>	<p><b>Draw or paint a picture</b> of an <b>important scene</b> in the story. Using magazines and newspapers, <b>cut and paste words that describe the scenery and mood</b> (Eg. Happy, bright, dark, cloudy, scary). Be sure the <b>words help us understand what is important</b> in the scene and why.</p> <p><b>Hint:</b> look at the example of the “<i>Setting Picture</i>” and describing words we created as a class, to get an idea of how your picture might look.</p>	<p>Create 2 maps.</p> <ol style="list-style-type: none"> <li>1) One of an important place in the <b>book</b>.</li> <li>2) The other of an important place in <b>your life</b>.</li> </ol> <p>Label the maps to help viewer understand what the places are like and <b>why they are important</b> in the book, and in your life.</p> <p><b>Hint:</b> Look at other maps (on the wall of the classroom or in books) to get an idea of the important features that maps usually have.</p>	<p>Draw a timeline of the events that happened in the story, from the beginning to the end. The timeline should show 4-5 different scenes in the story. <b>Label</b> the timeline to explain the <b>time, place, and date</b> of each scene.</p> <p>Beside each label in your timeline, draw a face (eg: smiley, sad, scared, etc) to show the mood of each scene.</p> <p><b>Hint:</b> Look at the example of the timeline we created as a class to get an idea of how your timeline might look.</p>

<b>"Big Ideas"</b>	<p>Choose 4–5 words that <b><u>describe the important ideas of the story.</u></b></p> <p>For each word, explain how you think the word fits the message of the story.</p> <p>Then, choose 4–5 words that <b><u>describe your life.</u></b></p> <p>Explain why you chose those words and how they connect with your life story.</p>	<p>What are <b><u>3 lessons</u></b> that you think the main character learned from the events or problems that happened in the story?</p> <p><b><u>Explain each lesson</u></b> and what you think the main character learned the lesson from what happened in the story.</p> <p>Then, explain what you think the main character might do in the <b><u>future</u></b> if he or she faced the same event or problem again.</p>	<p>Create a poster to <b><u>advertise an important message</u></b> from the book. Your poster should include the following features:</p> <ol style="list-style-type: none"> <li>a) The message from the story.</li> <li>b) A scene or <b><u>picture</u></b> (featuring characters from the story) that <b><u>matches the theme.</u></b></li> <li>c) <b><u>Important information</u></b> about the book (eg: the name of the book, the names of the characters).</li> </ol> <p><b>Hints:</b></p> <p>Interesting posters are often <b><u>imaginative, colourful</u></b> and <b><u>exciting</u></b> to look at and talk about. Try to include these features in your poster.</p> <p>Look at the design and features of other posters (in the classroom or community) to get ideas of how your poster might look.</p>
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Adapted from: Tomlinson, C. (2003). *Fulfilling the promise of the differentiated classroom: Strategies and tools for responsive teaching*. Alexandria, VA: Association for Supervision and Curriculum Development, by Christina Erickson (2010).

Figure 5.

### Story Think-Tac-Toe: Primary (Version 2)

**Directions:** Choose 1 “Character,” 1 “Setting” and 1 “Theme” activity from each row, to help you and others think about your story. Talk to at least one other person about your chosen activity before you begin. Make sure that your work is:

- interesting
- full of details & describing words.
- imaginative

<b>Character</b>	<p>Make a comparison chart about yourself and a character in the book. Divide the chart into <b>4</b> sections.</p> <p>1) In the first two sections, explain how you and the character are the <b>same</b>.</p> <p>2) In the other two sections, explain how you and the character are <b>different</b>.</p> <p>Be sure to include the <b>most important traits</b> in each chart.</p> <p><b>Hint:</b> Look at the example of the comparison chart we created as a class to get ideas of how to create your own comparison chart.</p>	<p>Write a <b>newspaper report</b> about the main character in the book that talks about what the character did, or is doing with his or her life, <b>after the story ended</b>.</p> <p>In the article, explain <b>how old the character is</b> now, and <b>what he or she has been doing since the story ended</b>.</p> <p>Has the character had any more exciting adventures?</p> <p>Use lots of <b>describing</b> words to make your story <b>interesting</b> to the reader.</p> <p><b>Hint:</b> Look at examples of newspaper articles to see how they are written. Also look at the example of the newspaper column we created as a class, to get ideas of how you might write your newspaper report.</p>	<p>Write a description of a character from the story.</p> <p>a) Use lots of <b>describing</b> words to explain how the character <b>looks</b> and <b>acts</b>.</p> <p>b) Draw a <b>picture</b> to match your character’s description.</p> <p>c) Then, write a description of <b>yourself</b>.</p> <p><b>Hint:</b> Look at the character description we created as a class, to get ideas of how to write your descriptions.</p>
<b>Setting</b>	<p>Look at pictures from magazines, newspapers and the Internet to find a <b>real-world location</b> that looks <b>similar</b> to the setting in your story.</p> <p>Use the pictures to create a collage that matches the setting of the story.</p> <p>Then write a paragraph to <b>explain the location</b> of the pictures you chose, and <b>describe</b> how the scenery <b>matches</b> the setting of the story.</p>	<p>Create 2 maps.</p> <p>1) One of an important place in the <b>book</b>.</p> <p>2) The other of an important place in <b>your life</b>.</p> <p>Label the maps to help viewers understand what the places are like and <b>why they are important</b> in the book, and in your life.</p> <p><b>Hint:</b> Look at other maps (on the wall of the classroom, or in books) to get an idea of the important features that maps usually have.</p>	<p>Would this story have been different if it happened in a different time or place?</p> <p>Choose a <b>new setting</b> for the story that is different than the one it takes place in now.</p> <p>Choose <b>2-3 events</b> in the story and explain how each event would be <b>different</b> in the new setting.</p> <p>Then describe how <b>your life</b> would change if you lived in that setting, by explaining <b>2-3</b> things in <b>your own life</b> that would be <b>different</b>.</p>

<b>Big Ideas</b>	<p>Make a <b>connection</b> between a <b>"big idea"</b> in <b>this</b> story <b>and another story</b> that has the same message.</p> <p><b>Describe</b> how the message is presented in <b>each</b> story. Do you feel that one story presents the theme in a better way than the other story?</p> <p><b>Explain</b> why or why not.</p>	<p>Choose <b>one</b> important message or "big idea" in the story. <b>Explain</b> in 3–4 sentences, what the message is, and how it is presented in the story. Then, with a partner, write and perform a <b>short play or skit</b> with the <b>same</b> message.</p> <p><b>Hint:</b> Practice reading and performing your lines with your partner <b>several</b> (3 or more) times, <b>before performing in front of an audience.</b></p>	<p>Create a poster to <b>advertise an important message</b> from the book.</p> <p>Your poster should include the following features:</p> <p>a) The message from the story.</p> <p>b) A scene or <b>picture</b> (featuring characters from the story) that <b>matches the theme.</b></p> <p>c) <b>Important information</b> about the book (eg: the name of the book, the names of the characters).</p> <p><b>Hints:</b> Interesting posters are often <b>imaginative, colourful and exciting</b> to look at and talk about. Try to include these features in your poster. Look at the design and features of other posters (in the classroom or community) to get ideas of how your poster might look.</p>
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I chose to adapt this tool to create an instrument for teaching primary students, as it incorporates many of the elements of effective differentiated instruction. Firstly, the instructional tool allows for differentiation by readiness, interests and learning profile. As there are two versions of the activity sheet, featuring tiered learning tasks of varying degrees of difficulty and abstractness, teachers can ensure that all students are able to choose activities that correspond to their readiness levels and are also appropriately challenged. In addition, the "tic-tac-toe" format of the activity allows students ample choice in their learning tasks, as students can choose activities that are at their ability levels as well as appeal to their interests. Furthermore, while all the tasks differ in type, they all meet the same learning goals, as all students are required to complete one task from each of three themes.

In modifying the activity, I simplified the tasks to make them developmentally

appropriate for primary literacy learning. While the intended grade for the original activity is unspecified, from the complexity of the tasks, I judge the approximate grade level to be Grades 6-7. I, in turn, modified the assignment to create tasks that are appropriate for Grades 2-3, based on the learning outcomes specified in the *British Columbia Language Arts IRP*. The adapted *Think-Tac-Toe* meets the following prescribed learning outcomes (PLOs), for Grades 2 and 3, in accordance with the BC Language Arts IRP: *A1, A2, A5, B6, B7, B8, B11, C1, C2, C3, C4, C5, C7, C8* and *C10* (BC Ministry of Education, 2006a).

In the area of oral language, this learning tool requires students to use speaking and listening to interact with others (A1), and; use speaking to explore, express, and present ideas, information, and feelings (A2) (BC Ministry of Education, 2006a). In the area of reading and viewing, the tool asks students to use a variety of strategies during reading to construct, monitor, and confirm meaning (B6); use a variety of strategies after reading and viewing to confirm and extend meaning (B7); respond to selections they read or view by expressing an opinion with some supporting evidence and making connections (B8), and; recognize and derive meaning from the structures and features of texts (B11) (BC Ministry of Education). Finally, in the area of writing and representing, the learning tool requires students to create a variety of clear personal writing and representations that express connections to personal experiences, ideas, and opinions (C1); create a variety of clear, easy-to-follow informational writing and representations (C2); create a variety of imaginative writing and representations (C3); use a variety of strategies before writing and representing, including setting a purpose, identifying an audience, and generating, selecting, developing, and organizing ideas from personal interest, prompts, models of good literature, and/or graphics (C4) and; use a variety of strategies during writing and representing to express thoughts (C5) (BC Ministry of Education, 2006a). *Think-Tac-Toe* also asks students to

use writing and representing to express personal responses and opinions about experiences and texts (C7); use writing and representing to extend thinking, by developing explanations, expressing alternative viewpoints and demonstrating new understandings (C8) and; use the features and conventions of language to express meaning in their writing and representing (C10) (BC Ministry of Education, 2006a).

In order to create symmetry between the two examples, I tried as much as possible to maintain the learning objectives of the original assignment and thus, kept the same topic and themes in the modified version. In adapting the individual tasks, I sought to maintain the same goals of the original version, and only changed the tasks completely if I believed them to be too complicated for primary students. In addition, I simplified the directions and used bold font and underlining to highlight key words and make the language clearer and more accessible for younger students. I also included “hints” in many of the complex activities, to direct students toward concrete examples (either done as a class or that may be found in the classroom) as well as offer further help for students who are unsure of the task requirements. Finally, I modified the font to make the text more visually appealing for primary students to read. This modified instructional tool is intended to be used as a springboard for a half-day professional development workshop about differentiation, directed toward primary teachers (for an outline of the workshop, see Appendix C).

## Chapter 4

### Reflections on My Learning

In investigating differentiated instruction in this project, I discovered the topic of differentiation instruction to be much more complex than I had originally thought. Initially, I had a limited understanding of DI. Having not received an introduction to differentiation during my pre-service teacher training, the majority of my knowledge about DI was informed by a graduate education course I took at the University of Victoria, taught by Dr. Ruthanne Tobin. While the course was extremely informative and provided me with a comprehensive overview of differentiation, DI is such a multifaceted topic that, even after completing this project, I feel as though I am just beginning to understand differentiated instruction and its roots in educational theory and research. Creating this project has also helped me to gain a more thorough understanding of the numerous applications differentiation holds in terms of teaching students of varying abilities, backgrounds and grade levels.

I also found adapting the learning tool, *Think-Tac-Toe*, for primary language and literacy to be a valuable learning experience, as it helped me to develop expertise in creating and modifying activities that are appropriate for primary literacy learning, as that is the age group I most want to teach. In modifying the tool, I learned that I had to be thoughtful about the task requirements, as well as the language I used, to ensure that each task was not only developmentally appropriate for primary students, but also met the original learning goals, and was engaging for primary-aged students. It should be noted that this learning tool has not yet been field-tested. I anticipate that using *Think-Tac-Toe* to facilitate primary literacy learning may result in future revisions to the learning tool, depending on primary students' responses to the tasks. Further revisions may also be made to the tasks as a result of the feedback received from

participants of the professional development workshop.

In addition, I found that designing a professional development workshop for primary teachers to be a challenging, yet engaging task. This project gave me much to think about, in terms of creating a learning experience that effectively communicated the most important facets of DI to experienced teachers, who have had limited experience using this instructional approach. Having never designed a professional development workshop before, I found some aspects challenging, such as anticipating the appropriate length of time to spend on each topic or activity. However, I also found creating the workshop to be an engaging experience, as I was able to be creative in my design. In particular, I enjoyed planning activities for participants to demonstrate their learning, as well as creating interesting PowerPoint presentations to capture the audience's attention, and communicate the most important features of DI.

Upon reflecting on my learning throughout this experience, I feel as though I have learned much about differentiated instruction and how it may be used to teach primary language and literacy. Furthermore, receiving Carol Ann Tomlinson's email response to my questions about differentiation strengthened my belief that DI is a beneficial form of instruction that has the ability to positively influence students' academic achievement. As Tomlinson asserts, DI is an important instructional approach that responds to the needs of the increasingly diverse population of students in schools today (C. A. Tomlinson, personal communication, February 12, 2010). Tomlinson's reply also helped to reaffirm my view that is teachers' responsibility to do whatever it takes to make the classroom work for each student who is there, and that through differentiation, this goal can be achieved (C. A. Tomlinson, personal communication, 2010).

Through researching DI for this project and reading Tomlinson's personal convictions about why she believes differentiation is a significant approach to instruction, I feel inspired to

use differentiation in my future classroom. While I am still exploring the possibilities of this complex instructional approach, and will continue to learn as I begin my teaching career, having completed my project report, I feel confident that I can use differentiated instruction to positively influence the academic success of the students I will teach.

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## Appendix A

### Examined Scholarly Publications About Differentiated Instruction

- Cox, S. G. (2008). *Differentiated Instruction in the Elementary Classroom*.
- George, P. S. (2005). *A Rationale for Differentiating Instruction in the Regular Classroom*.
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## Appendix B

### Personal Communication Between Carol Ann Tomlinson and Myself

**To:** Tomlinson, Carol (cat3y)  
**From:** Christina Erickson  
**Date:** January 25, 2010  
**Subject:** Thesis Questions About Differentiated Instruction

Dear Dr. Tomlinson,

My name is Christina Erickson and I am a graduate student at the University of Victoria, pursuing a Master's of Education degree, with a concentration in Language and Literacy. I am currently writing my thesis under the direction of Dr. Ruthanne Tobin., about Differentiated Instruction (DI) and your impressive influence on the development of DI. I am writing to ask you a few questions about DI to inform my thesis and gain a better understanding of your perspective of this inspiring approach to instruction. Given how valuable your time must be, I appreciate the insight you might provide me. I have kept my four questions short.

1. What drew you to examine DI as a method of instruction and focus of your scholarly and professional work?
2. What do you believe is the impact of DI when adopted by a teacher who in the past has used a more traditional instructional approach?
3. As a new teacher and novice to DI myself, what advice would you offer to me and other novice teachers when beginning the differentiation process?
4. Why do you believe a DI approach is relevant to 2010 and beyond?

Thank you very much for taking the time to read my email. If you are able to reply to my questions, as well as offer any other insight about DI, I would appreciate it so much. I have read many of your articles and books and value your ideas about the direction of education. Having your personal response to my questions, to inform my thesis and view of DI would mean a lot to me.

Thank you very much.

Sincerely,

Christina Erickson

**From:** Tomlinson, Carol (cat3y)  
**To:** Christina Erickson  
**Date:** February 12, 2010  
**Subject:** RE: Thesis Questions About Differentiated Instruction

*Hi Christina-*

*See below for some brief answers. Good luck with your work! Carol*

1. What drew you to examine DI as a method of instruction and focus of your scholarly and professional work?

*I began to differentiate when I was a classroom teacher (which I was for 21 years). My students were VERY diverse in their needs and it was clear to me, even as a novice teacher, that I simply could not reach them by doing the same thing in the same way for everyone.*

2. What do you believe is the impact of DI when adopted by a teacher who in the past has used a more traditional instructional approach?

*Making change is difficult, of course, and changing the way we think and work when we're surrounded by young bodies doesn't make things any easier, but the vast majority of teachers I hear from are delighted with the positive outcomes for their students when the teachers begin to differentiate—more engagement, more commitment, better learning results. And I think teachers feel more professional as well. It's satisfying to know students better and to work from that point of knowledge.*

3. As a new teacher and novice to DI myself, what advice would you offer to me and other novice teachers when beginning the differentiation process?

*I think it's important to work from a belief system—a philosophy—that a teacher has the obligation (and opportunity) to do whatever it takes to make the classroom work for each student who is there. That belief system will sustain you when you're looking for solutions and can't yet find them. It's also critical to understand differentiation as well as you can—and to keep that knowledge building. Differentiation—good teaching—is not something we master and move on. It's a career-long process, and teachers who mean to grow professionally and personally every day that they're in the classroom are probably the best teachers. In addition, start small but move steadily. Don't expect yourself to be perfect on Day 1—or day 180. On the other hand, don't let yourself stand still either.*

4. Why do you believe a DI approach is relevant to 2010 and beyond?

*Our student populations are likely to continue to become more academically diverse, not less so. For that reason, I think differentiation will continue to be very important. It may change its shape as we learn more, but attending to the learning needs of diverse student populations will likely be central to successful teaching for the foreseeable future.*

## Appendix C

### Primary DI Professional Development Workshop Outline

*Created and Facilitated by Christina Erickson*

**Time:** Approx 3.5 - 4 hours

**Purpose:** The purpose of this workshop is to provide primary teachers, who have limited experience using DI, with an understanding of what DI is, and how it may be used to teach primary language and literacy.

Through a blend of teacher-led discussions, as well as small and whole group activities, this professional development workshop will explicate the major tenets of DI and demonstrate to primary teachers how they may use DI in their own classrooms. The workshop will also provide an opportunity for teachers to create their own differentiated lessons to further participants' understanding of how to use DI.

In addition, this workshop will address the barriers that teachers often face in implementing DI, and help to offer solutions for teachers to overcome those barriers and successfully use DI. The workshop will conclude with an explanation of Think-Tac-Toe, the learning tool I have modified for primary language instruction. Copies of the learning tool will be made available for teachers to take with them as a guide for differentiating in their own classrooms.

**Materials Needed:**

Quantity	Material	Notes
2	PowerPoint Presentations	
1; 1	Computer; projector	
1	Workshop Roadmap	On chart paper, or blackboard
1/person	<i>Primary Think-Tac-Toe</i>	On 8 x 11.5" paper

	<i>DI Concept Map</i>	
4-5; 1/group	Primary language and literacy lesson plans	Supplied by participants
1	Video about differentiating	* <i>If available</i>
2/group	Text examples of differentiating	From <i>Differentiation in Practice</i> (Chapter 6)
(6-8)	Transparency sheets	
1 pad	Chart paper	
Assorted	Markers & overhead markers	
-	Paper	For writing KWL charts; goals
-	Pens/Pencils	

### Workshop Plan

Time	Activity
2-3 min	<p><b>1. Introduction</b>  <i>Capture audience's attention</i></p> <ul style="list-style-type: none"> <li>• PowerPoint Presentation #1 (set to True Colours – by Phil Collins)</li> <li>• PP will show 5-6 different profiles of students found in a typical classroom that could benefit from DI (Students differ in their abilities, profiles and interests)</li> <li>• Concluding question: <i>How can a teacher effectively teach students with a wide range of abilities, interests, etc, while still meeting the learning goals of the curriculum?</i> Differentiated Instruction.</li> </ul>
5-6 min	<p><b><u>Introduction, following PP:</u></b></p> <ul style="list-style-type: none"> <li>• Introduce myself as facilitator</li> <li>• Allow participants to introduce themselves to the group, via Think-Pair-Share</li> <li>• Post “Roadmap” for workshop (or write on blackboard)</li> <li>• Explain purpose of workshop</li> </ul>
15 min	<p><b>2. Brainstorm/KWL</b>  <i>Find out what participants currently know about DI, using a KWL chart</i></p> <ul style="list-style-type: none"> <li>• Each participants receives a KWL chart of their own and records their own K's &amp; W's (L's discussed at end)</li> <li>• Then shares with partner in Think-Pair-Share <ul style="list-style-type: none"> <li>-What they already know</li> <li>-What they wonder about DI</li> </ul> </li> <li>• Then share answers with whole group and discuss how they have used DI and what they wonder</li> <li>• Record groups' answers on board</li> </ul>
15 min	<p><b>3. PowerPoint Presentation #2: What is DI?</b>  <i>Demonstrates <u>what DI is</u>, <u>how it benefits students</u> with a wide range of abilities and <u>why teachers should differentiate</u> in primary grades</i></p> <ul style="list-style-type: none"> <li>• Distribute DI concept map</li> </ul>
30 minutes (+ video)	<p><b>4. Examples</b>  Show DI in practice through a video &amp; text examples (ie: Chapter 6 in The Differentiated Classroom)</p>

	<ul style="list-style-type: none"> <li>• Show video (if available)</li> <li>• Divide participants into groups of 3-4</li> <li>• Each group receives 1-2 examples of DI in practice, (from text)</li> <li>• Each group discuss if/how they differentiated and if/why it was effective</li> <li>• Shares examples with whole group</li> <li>• Offer other suggestions</li> <li>• Facilitator covers up “How” and “Why” (from text), then discusses &amp; reveals answers.</li> </ul>
45 min	<p><b>5. Creating a Differentiated Lesson</b> (Facilitator offers each group a copy of an undifferentiated primary language lesson)</p> <ul style="list-style-type: none"> <li>• Divide group into groups of 3-4 (depending on number of participants)</li> <li>• Each group receives 1 lesson plan, overhead transparency &amp; markers</li> <li>• Each group will discuss and determine how to add in differentiation, make changes</li> <li>• Groups will present and explain changes to the group and explain how they feel they have adequately differentiated</li> <li>• During presentations, other groups listen and add in suggestions of how groups can further differentiate, to be recorded on transparency</li> <li>• Sheets are later photocopied and redistributed to participants as examples of DI they can use in their own classrooms</li> </ul>
30 minutes	<p><b>6. Barriers “Cakewalk”</b> Participants brainstorm barriers to DI (ie: why DI sounds great, but why they can’t use it all the time)</p> <ul style="list-style-type: none"> <li>• Barriers are recorded on board</li> <li>• Participants are broken into groups of 3-4</li> <li>• Each group receives 1 barrier (each barrier is written on a separate piece of chart paper)</li> <li>• Each group brainstorms how they can overcome the barrier</li> <li>• Groups are given 5-10 minutes to discuss/record solutions to overcoming barriers</li> <li>• Post solutions on chart paper and post to wall. Groups then move to next barrier</li> <li>• After each group has visited each barrier sheet, solutions are discussed. More are added by facilitator, if not already determined by group</li> </ul>
20 minutes	<p><b>7. Distribute Handout</b> <i>Explain purpose of ‘Think-Tac-Toe’</i></p> <ul style="list-style-type: none"> <li>-How it is used</li> <li>-How it differentiates and tiers learning</li> <li>-Handout one copy per person</li> </ul>
20 minutes	<p><b>8. Setting DI Goals</b> <i>Help participants begin the differentiation process.</i> (See Tomlinson Differentiation in Elementary Grades)</p> <ul style="list-style-type: none"> <li>• Participants are divided into groups again of 3-4</li> </ul>

	<ul style="list-style-type: none"> <li>• Each groups brainstorms and lists ways that they will/can use DI in their own classrooms</li> <li>• Groups share with whole group</li> <li>• Individually, each person receives a piece of paper to record at least 3 DI goals that they will achieve by the end of the school year <ul style="list-style-type: none"> <li>- 1-2: short term goals (to be accomplished right away/soon)</li> <li>- 1-2: long term goals (to be accomplished by the end of the year)</li> <li>- Plus 2-3 ideas of how they will achieve this</li> </ul> </li> <li>• Share goals with partner or 2 other participants. Add in ideas/suggestions from group members</li> </ul>
15 minutes	<p><b>9. Recap</b> <i>Tying up loose ends</i></p> <ul style="list-style-type: none"> <li>• Review ‘wonders’ that were not previously discussed (if any)</li> <li>• Participants record what they Learned on their personal KWL</li> <li>• Share what they learned with partner in THINK-PAIR-SHARE</li> <li>• Share with whole group</li> <li>• L’s are recorded on large KWL chart</li> </ul>
10 minutes	<p><b>10. Conclusion:</b> <i>Q&amp;A about DI and PD workshop</i></p>

## Appendix D

### PowerPoint Presentation #1

Chloe is a bright, talkative seven year-old, who loves to read and write. She often sits waiting for others to catch on to concepts she already knows. A born leader, Chloe loves working with others and making sure everyone has a role in the group.

Derek is a thoughtful second-grade student who finds reading and writing challenging. Derek has difficulty writing more than a few sentences, but is able to draw elaborate pictures that capture his ideas.

Nathan is a lively third-grade student with significant learning difficulties. His reading skills have been assessed at a first-grade level and he often has difficulty making sense of what he reads. For Nathan, sitting still and paying attention is often a challenging task.

Ella is a bright seven-year old with a non-verbal learning disability, which affects her reading comprehension. She benefits from oral instruction to clarify important concepts. Once she understands what is expected of her, Ella usually succeeds at meeting the expectations and is able to achieve well.

Jitu is a quiet eight-year old from Nepal. Having only just arrived to Canada a few months ago, he is still adjusting to his new environment and is slowly learning English. Jitu receives individual language support several times a week, but he still feels overwhelmed trying to make sense of what he is learning.

As a teacher, how can you effectively respond to the many and varying learning needs of students like these in your classroom?

**DIFFERENTIATED  
INSTRUCTION.**

## Appendix E

### PowerPoint Presentation #2

What is  
Differentiated  
Instruction?

An Introduction...

*"In order to teach effectively,  
educators must respond to  
students' varying abilities, by  
teaching students from where  
they are." ~ Confucius*

Differentiated  
Instruction (DI)

is a responsive instructional approach  
that facilitates learning  
according to students' abilities  
and interests.

All Students Differ in 3 Ways:

Readiness

Interests

Learning Profile

Readiness

- Students' natural ability to make sense of new information
- Students with low readiness need additional support to foster understanding and fill in knowledge gaps
- Students with high readiness need more complex activities, to extend their knowledge and facilitate deeper learning

Interest

- Students' curiosity about, or preference for, certain topics (ie: sports, superheroes, unicorns, etc.)
- Considering students' interests is critical in engaging students in what they are learning, as it helps to foster and sustain their motivation for learning

Learning Profile

- The way that students learn **best**
- Comprised of many different factors that influence learning preferences, such as:
  - group-work or independent settings
  - noise level
  - how students prefer to present their learning (written, oral, pictorial)
- May be influenced by gender, age, and ethnicity

The Curricular Elements

- ≡ Content
- ≡ Process
- ≡ Product

Content

- "The curriculum"
- Teachers may adjust the complexity of the content in relation to students' understanding of the subject
- Teachers may also adjust how students receive the content, using visual aids, manipulatives, audio-recordings and additional texts



## Appendix F

### **Primary DI Professional Development Workshop Roadmap**

*(To be posted on blackboard or chart paper, at beginning of workshop)*

1. First Impressions
2. Brainstormin': What Do You Know About DI?
3. What is DI and How Does it Benefit Students in Primary Grades?
4. The Ins and Outs of DI: Examples
5. "DI it Yourself": Creating a Differentiated Lesson
6. "That Sounds Great, But...": Barriers to DI
7. Think-Tac-Toe
8. Setting Goals
9. Tying Up Loose Ends: Recap
10. Q & A

## Appendix G

### Differentiation Text Examples

From: Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development

Directions: Each group will receive a text example of differentiation in practice. Each group will read through the differentiation description and decide **what** is being differentiated (content, process or product) and **how** and **why** differentiation is occurring (Text answers are covered while groups determine their responses, and revealed later during whole-group discussion).

#### 1. **Grade 1: Classification**

Yesterday, Mrs. Lane's 1<sup>st</sup> graders took a nature walk to gather objects they could think about as scientists might. Today they will work in groups to classify the items they found on their walk. All students will first classify items as living or non-living. Then, within those categories, students will classify by other similarities (such as shape, size, colour and type of object). Mrs. Lane has made one adaptation at several tables. Some of the early 1<sup>st</sup> graders will classify only the actual objects. At other tables, she has replaced some of the objects with cards that bear the object's name. This is for early readers excited about their newly evolving skill. Based on their readiness to decode the object names, several of the early readers have one or two cards, by others have many.

#### **Differentiate What:**

(Answer: the teacher is differentiating materials, therefore she is differentiating content).

#### **Differentiate How:**

(Answer: she is modifying instruction based on her assessment of students' reading readiness)

#### **Differentiate Why:**

(Answer: she wants young readers to have as many chances as possible to use their reading skills. The word cards help non-readers too; when students share how they classified the items, non-readers experience examples of object-word connection, which is essential in learning to read).

#### 2. **Grade 3: Proofreading**

Students in Mr. Noye's class go to a center where they refine their ability to detect and refine their ability to detect and correct errors in punctuation, spelling and sentence structure. Sometimes they find written messages from characters in stories they are reading, people in current events, their teacher, or the gnomes and trolls Mr. Noyes declares inhabit the classroom's crannies, to observe what goes on. Mr. Noyes of course writes these pieces with humour, a dash of wisdom and varying degrees and types of

errors, depending on which students will be called upon to edit them. At other times, students leave their own writing in an inbox at the proofreading centre, so peers can help them polish their drafts. Mr. Noyes also screens these pieces, asking particular students to review certain papers, which he knows they can respond to in a meaningful way, based on the author's needs and the reviewer's proficiency.

**Differentiate What:**

(Answer: skills based content is the focus. Mr. Noyes also differentiates the process or activities he creates, to be a good match for the students' skill needs).

**Differentiate How:**

(Answer: the teacher is predominantly differentiating based on readiness—a proficiency in spelling, punctuation and sentence structure. He is also aware of students' interests as he writes notes from favourite characters, sports heroes and gnomes to appeal to particular students' interests)

**Differentiate Why:**

(Answer: Mr Noyes' students have different skill needs in writing and proofing. Varying the errors provides him with an efficient way to move students along the skills continuum as quickly as possible. His awareness of student readiness also allows him to convene various small groups for direct instruction on particular skills, and he can bring together groups with similar tasks for the purpose of checking work. His students are also highly motivated by his humour and the chance to him peers do better with writing.)

**3. Grade 2: Alphabetizing**

Ms. Jacobsen build several alphabetizing boards with the heads of large nails protruding from brightly coloured plywood. Students practice their alphabetizing skills by hanging words on the nails in appropriate order. Ms. Jacobsen gives a student a cup of round paper key tags with metal rims. Each tag has a word to be alphabetized. Some cups contain unfamiliar words with few syllables and distinctly different initial letters. Others contain words that closely resemble each other in spelling and configuration. Sometimes she puts a made-up word on a tag. Students get a small treat if they spot the phoney word and prove to the class why it is fake by citing a rule or using a dictionary as evidence.

**Differentiate What:**

(Answer: the activity (process) stays the same. It is the material (content) that varies).

**Differentiate How:**

(Answer: skills readiness is the focus of differentiation. For one student words like “car” and “cap” are challenging, while for another words such as “choose” and “chose” are more appropriate)

**Differentiate Why:**

(Answer: The teacher wants to meet each teacher where they are and help them develop skills to move forward as quickly as possible).