


# DIFFERENTIATED INSTRUCTION IN THE INCLUSIVE EARLY CHILDHOOD CLASSROOM

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## ABSTRACT

Differentiated instruction (DI) is an approach that assumes there is a diversity of learners in every classroom and that all of those learners can be reached if a variety of methods and activities are used. Second language learners, students receiving special education instruction, and gifted students can all learn in the same classroom. The number and variety of learners in each of these categories is increasing, and all students learn in different ways. As curriculum becomes more research driven, and evidenced-based practices are emphasized, teachers will increasingly find that teaching to all students without considering individual learning needs will not work as effectively. When teachers use differentiation in their instruction, they provide learning opportunities instead of just dispensing knowledge. All teachers benefit from guidance and collaboration when providing instruction that is differentiated to maximize learning for all students. This paper provides an overview of DI, describe how to use DI in the inclusive early childhood education setting, and offer techniques for using DI in the educational setting.

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## Introduction

Differentiated instruction (DI) is an approach that assumes there is a diversity of learners in every classroom and that all of those learners can be reached if a variety of methods and activities are used. English language learners, students receiving special education instruction, and gifted students all learn in the same classroom (Bender, 2002). Each of these student categories is increasing, and all students learn in different ways. As curriculum becomes more research driven, and evidenced-based practices are emphasized, teachers will increasingly find that writing a lesson and teaching it to all students without considering individual learning needs will not work as effectively (Parsons, Dodman, & Burrowbridge, 2013).

When teachers use differentiation in their instruction, they provide learning opportunities instead of just dispensing knowledge (Firmender, Reis, & Sweeny, 2013). With many schools using Response to Intervention (RTI), teachers need to provide DI before referring a child for special education services and realize that both of these (RTI and DI) will be beneficial for the children and teacher. RTI is used in K-12 schools to provide three levels of interventions to differentiate the support and instruction that is given to students who are falling behind (Lindeman, 2013). When using RTI, DI may prevent the development of reading difficulties as students receive individualized attention sooner (Mathes, Denton, Fletcher, Anthony, Francis, & Schatschneider, 2005).

The first tier of RTI requires teachers to differentiate instruction to meet the needs of all the learners in the class (Lindeman, 2013). The students who do not learn from the instruction in tier 1 will move on to tier 2, where they will receive interventions embedded throughout the day specifically designed to differentiate the methods of teaching (Lindeman, 2013). Tier 3 includes individualized interventions using a variety of instructional practices, such as one-on-one work with the teacher, for the few students who do not respond to tier 1 or 2 instructional methods (Lindeman, 2013).

Most educators will have experienced an undifferentiated classroom while growing up. It is what most teachers will picture as a typical classroom from their memory. An undifferentiated classroom had one lesson and activity taught to all students. Students were expected to adapt to this style even if it wasn't their style of learning. In the typical undifferentiated classroom, students are grouped by skill into several reading groups that are chosen by the teacher. (Tomlinson (2005; 2013) described grouping students within a differentiated classroom as fluid rather than set. Students are not put into set groups; rather their groups vary by activity and interests.

Differentiation requires an assessment of student's ability to properly plan instruction to meet the needs of the class. It also means providing ongoing assessments to see if students are learning from the lessons taught. A differentiated classroom incorporates these principles (Smit & Humpert, 2012):

- *the teacher attends to students' differences,*
- *formative assessment assists in identifying the next learning sequence,*
- *the teacher modifies content, process, and products in accordance with the learners' needs, and*
- *the student and teacher collaborate in the learning process.*

These classrooms build on the concept of scaffolding, where the teacher builds the student's learning from the base of his or her knowledge. Teachers in these classrooms will likely follow Vygotsky's (1978) zone of proximal development (ZPD). ZPD is based on the understanding that learning will not occur at its optimal level if children are not challenged enough (Tomlinson, 2013) or if they are over-challenged and frustrated (Kapusnick & Hauslein, 2001). These classrooms also employ self-regulated student learning, explicit, direct and extended instruction to groups, especially for students who are struggling (Tobin & McInnes, 2008).

Differentiated instruction is useful in any classroom, however, no more so than the early childhood classroom. Early childhood classrooms are frequently mixed in age and ability. These classrooms may contain children who have not yet been identified as learning disabled, as this may be the first educational experience. In the United States,

there is no standardized education services for all children in the early childhood years, so there may be wide variations in experiences and opportunities children have had prior to entering an early childhood education setting. Therefore, as more preschools become inclusive, it is essential that teachers use a variety of planned, targeted methods to reach this diverse group of learners in order to see progress in all students.

According to Tomlinson (2005), DI includes four areas, content (what students will learn), process (how students learn and digest information), product (the way students demonstrate what they have learned) and the learning environment (how the classroom environment is set up to maximize learning). To apply these areas in the inclusive classroom teachers can evaluate if the DI allows access, participation, and support to the child receiving special education instruction (McCormick, 2012). Early Childhood (EC) teachers typically put emphasis on development in planning curriculum, resulting in a similar concept of DI (Gadzikowski, 2013). Early childhood teachers individualize interactions with children in the classroom every day in caregiving, conversations, and social interactions that they have with the students (Gadzikowski, 2013). Currently, most planned differentiation in the early childhood classroom is aimed at learners who are struggling not for gifted or advanced students (Gadzikowski, 2013).

As with all teachers, EC and ECSE teachers benefit from guidance and collaboration when providing instruction that is differentiated to maximize learning for all students (Tomlinson, 2005). This paper will provide an overview of DI, how to use it in the inclusive EC setting, and will provide techniques for using DI in the EC setting.

### **Content Differentiation in EC Inclusive Classrooms**

There are many ways a teacher can differentiate content. Renzulli created a tool to assist advanced students to get the most out of their time spent learning called compacting, which has three stages (Tomlinson, 2005). First, the instructor uses assessment to identify students who would benefit from compacting. Through the assessments, the teacher evaluates student knowledge about a particular topic. This assessment may be as simple as teacher observation or conversation with the student.

The second stage is for the teacher to plan learning experiences that will teach the child the skills the student did not understand, as identified from the assessment (Tomlinson, 2005). Stage three involves the teacher and student planning a project to expand a child's knowledge of the new subject (Tomlinson, 2005). This method allows the child to gain new knowledge, and to avoid repeating tasks that are already mastered. Advanced students benefit little from repeating what skills they have already learned, but they benefit greatly from engaging in more challenging learning (Tomlinson, 2005). To make content inclusive it is important to look at any differences and similarities students have between abilities and interests (McCormick, 2012).

Teachers can differentiate learning content for students by using appropriate skill level activities with flexible, small groupings of children with similar ability levels (Firmender et al., 2013; Tobin & Tippett, 2014). Teachers can develop different teaching plans for a variety of student skill levels by choosing challenging and diverse materials when planning lessons and by engaging students at each level (Tobin & Tippett, 2014). General education instructors should work with special education teachers to purposefully plan opportunities for children with Individualized Education Plans or Individualized Family Service Plan (IEP/ IFSP). This collaboration will assist the classroom teacher in providing the child with opportunities to practice and gain knowledge in the IEP/IFSP goals and objectives while participating in the classroom (McCormick, 2012). It is also important for the teacher to make a variety of materials available for students to explore (Anthony, Tippet, & Yore, 2010). Teachers can include manipulatives, visual and audio devices, and explicit directions for students on IEPs (Huebner, 2010).

### **Process Differentiation in EC Inclusive Classrooms**

Differentiating process is an opportunity for students to understand, in a variety of ways, the ideas and skills presented during learning activities (Tomlinson, 2005). As with all differentiation, it is important that the process activities hold interest for students, which should be determined by assessment (Scigliano & Hipsky, 2010). Finding common interests shared by students with various abilities and applying them

to the process activities is useful in gaining participation from students of all abilities (McCormick, 2012). For instance, if a variety of students love dinosaurs, they can be incorporated into the activities to elevate interest. More ideas for differentiating process, which need to be evaluated and modified with individual student ability, include:

1. *Using an inquiry process allowing students to think of ways they could get more information about a topic (Gadzikowski, 2013),*
2. *Allowing children to ask and find answers for their own questions (Gadzikowski, 2013),*
3. *Offering a variety of learning center choices, so child can pick which appeals most (Gadzikowski, 2013; Tobin & Tippett, 2014),*
4. *Adapting the materials to student level by adding items or taking away to increase or decrease the challenge (Gadzikowski, 2013),*
5. *Allowing children to retell a story with the choice of a variety of methods that could include felt pieces, videotaping, or acting out (Scull, 2013),*
6. *Assisting children in labeling work with descriptive words (Scull, 2013),*  
*Allowing students to share personal stories of how subject relates to their life (Parsons et al., 2013), and*
7. *Providing a variety of writing materials so children can express themselves with a form of writing, whether it is scribbling, writing words or drawing a picture (Justice & Vukelich, 2008).*

### **Product Differentiation in EC Inclusive Classrooms**

To differentiate the product would be a way to assess student knowledge, understanding, and provoke thought (Tomlinson, 2005). According to Tomlinson (2005), differentiating products are a way for students to re-think, use, and extend what they have learned over a long period. In an inclusive classroom, it is important to provide clear instructions in what skills they need to demonstrate (Tomlinson, 2005). Teachers and students can make adaptations to the product according to the child's abilities, IEP/IFSP, and interests. Collaborating with the special education staff is

essential to develop appropriate product assignments as the IEP objectives and goals will assist in decision-making. Products should be individualized and modified and will allow students to demonstrate their learning with their skill grouped peers. Possible examples of products could include verbal retelling of a story (Bender, 2002), discussion of lesson (Bender, 2002), drawing pictures or making a poster showing what they learned (Tobin & Tippett, 2014), creating a book to show what they learned (Gadzikowski, 2013).

### **Learning Environment in EC Inclusive Classrooms**

The learning environment following a DI model should "invite flexibility" (Tomlinson, 2005). The classroom should be orderly and organized, but not restrictive (Tomlinson, 2005). Organization and reliable structure within the classroom is helpful to students with exceptionalities, as it allows better focus and attention (Bender, 2002). Toys, art supplies, manipulatives, writing materials, instruments, and sensory items should be kept in clear containers identified with picture and word labels. Strategies teachers can use to differentiate the learning environment could include, greeting students as they come in each day to gauge how they are doing (Tomlinson, Imbeau, 2010), using flexible grouping of students based on interests, skills, & ability (Huebner, 2010), providing materials that reflect a variety of cultures and home environments (Tomlinson, 2005), having materials in classrooms organized and representative of a variety of skills (Gadzikowski, 2013), offering explicit expectations (Huebner, 2010). EC teachers should seek collaboration with families, special education teachers, specialists, and other providers in the classroom (DEC/NAEYC, 2009). According to a joint position statement from the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) collaboration is a cornerstone for implementing high quality early childhood inclusion.

### **Technology in the inclusive DI classroom**

Teachers find technology a useful tool in differentiating instruction. Lindahl and Folkesson (2012) stated that the use of computers provides an additional opportunity for active exploration in the preschool setting. Many websites offer games and learning

activities that can be used to allow enhancement at varying levels helping teachers differentiate instruction in early childhood classrooms. Internet software websites such as pbskids.com, starfall.com, and smart board lessons can help instructors meet the needs of all students in the classroom by allowing changes to input. Technology aids DI by increasing accessibility options for visual, hearing, and motor difficulties. Text size, font and color can be changed to allow enhanced accessibility (Jones, Yssel, & Grant, 2012). Sound text readers aid dual language learners and students with visual difficulties. Technology also allows different means of output for students to express knowledge, the product of their learning (Jones et al., 2012). DI aims to provide multiple approaches to content, process, and product (Tomlinson, 2005), technology is an excellent way to do this. Nemeth and Simon (2013) suggested using a variety of items (e.g., interactive white board, smartphone, printer, internet) that are available in most classrooms for DI. These are common existing technologies to be utilized in instruction for students of varying abilities, including involving students who are dual language learners.

Technology also allows teachers to track student progress and assessment results, providing clear guidance in decision making for instruction (Bagnato, McLean, Macy, & Neisworth, 2011). Increasing use of handheld computer technology in the classroom or other natural settings will ensure that data is collected in unobtrusive ways (Bagnato et al., 2011). These types of computer devices, such as iPad or tablets, allow quick and efficient data collection and extrapolation. This data can be shared with other professionals and the child's family to enhance communication and learning (Bagnato et al., 2011). Videotaping can provide a snapshot of all children, allowing instructors to view even the smallest increment of skill development (Bagnato et al., 2011).

### **Assessment in the inclusive DI classroom**

Tomlinson (2005) stated that assessment in an effectively differentiated classroom is the foundation of successful instruction. Researchers (Brassard & Boehm, 2007) have indicated the value of using assessments and being cognizant of children's diverse backgrounds and experiences.



In the preschool setting, several formative assessments are commonly used and can assist teachers in planning DI. Some of these assessments are High Scope, Creative Curriculum, and IGDI's (Individual Growth and Development Indicators). Children have a higher rate of success in achieving identified outcomes and goals set by the teacher, the IEP/IFSP, or the family, when the needs of the child is linked with assessed abilities (Banerjee & Luckner, 2013). Teachers use ongoing or formative assessment to consistently monitor students' developing knowledge, understanding, and skill related to the topic at hand. Formative assessment guides the teacher in how to proceed with instruction in a way that maximizes the opportunity for student growth and success with key content (Tomlinson, 2005).

A study of commonly used assessments by Banerjee and Luckner (2013) found that of the top five most used assessments, three were curriculum-based assessment methods that are based on development and experience. Participants reported use of multiple methods of data collection such as observation in natural environments during typical occurring routines and using play-based assessments. This study found a need for teacher training in assessing students particularly students with disabilities and how to apply assessment data in planning their instructions (Banerjee & Luckner, 2013). Banerjee and Luckner (2013) noted that there are challenges that arise in assessment of early childhood students. Students are growing and developing at a faster rate than later years (Banerjee & Luckner, 2013). Early childhood students may present other challenges including short attention spans, possibly being nonverbal, and potentially having anxiety about interacting with strangers (Banerjee & Luckner, 2013).

Early childhood teachers who would like to use DI must assess student knowledge prior to instruction, during instruction and at the end of instruction (Tomlinson, 2005). As early childhood programs move toward inclusion in the K-12 public education system, data collection will more frequently be required. Specific examples of authentic assessment strategies can be found on the Utah Education Network (2003).

### **Motivation in the inclusive DI classroom**

DI is motivational as it is aimed at building on student interests and students' ZPD. Students will be more motivated when engaged in the learning activities (Gadzikowski, 2013). Teachers may also find other strategies such as partner work and teacher attention being motivational for students. Using motivation in the DI classroom should only be used if it is meaningful to the student. Teachers should pay attention to each student's values and culture as they can impact the effect of rewards and consequences (O'Meara, 2011). During a three-year study of teachers, those using DI practices had higher levels of response to their instructional behaviors than compared to teachers using standard techniques supporting the motivational factor of DI (VanTassel-Baska et al., 2008).

### **Conclusion**

As early childhood intervention was given a mandate to provide intervention plans for children from birth in the 1990's, EI has been individualizing education for young children (Bagnato et al., 2011). This, along with the individual developmental focus EC educators typically put on education makes DI a natural progression in the field of EC (Gadzikowski, 2013). A growing body of research has shown positive results for teachers using DI (Huebner, 2010). These results, along with the increased use of RTI, make DI an important practice for teachers to implement. To be effective at DI, teachers should seek out support and share techniques with experienced teachers (Dixon, Yssel, McConnell, & Hardin, 2014). The teacher having prior academic experience in inclusion is linked to successful implementation in preschool classrooms (Kraska & Boyle, 2014). These teachers were also more positive towards inclusive education (Kraska & Boyle, 2014). Experience and support are important in DI. Teachers can build the DI skills through practicing techniques such as those outlined in this article.

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## References and notes:

- Anthony, R., Tippet, C., & Yore, L. (2010). Pacific CRYSTAL project: Explicit literacy instruction embedded in middle school science classrooms. *Research in Science Education*, 40, 45-64. doi:10.1007/s11165-009-9156-7
- Bagnato, S. J., McLean, M., Macy, M., & Neisworth, J. T. (2011). Identifying instructional targets for early childhood via authentic assessment: Alignment of professional standards and practice-based evidence. *Journal of Early Intervention*, 33, 243–253. doi:10.1177/1053815111427565
- Banerjee, R., & Luckner, J. L. (2013). Assessment practices and training needs of early childhood professionals. *Journal of Early Childhood Teacher Education*, 34(3), 231-248.
- Bender, W. N. (2002). *Differentiating instruction for students with learning disabilities: Best teaching practices for general and special educators*. Corwin Press.
- Brassard, M., & Boehm, A. (2007). *Preschool assessment: Principles and practices*. Guilford Publications.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, 37(2), 111-127.
- Firmender, J. M., Reis, S. M., & Sweeny, S. M. (2013). Reading comprehension and fluency levels ranges across diverse classrooms: The need for differentiated reading instruction and content. *Gifted Child Quarterly*, 57(1), 3-14. doi:10.1177/0016986212460084
- Huebner, T. A. (2010). Differentiated Instruction. *Educational Leadership*, 67(5), 79-81
- Jones, R. E., Yssel, N., & Grant, C. (2012). Reading instruction in tier 1: Bridging the gaps by nesting evidence-based interventions within differentiated instruction. *Psychology in the Schools*, 49(3), 210-218. doi:10.1002/pits.21591
- Justice, L. M., & Vukelich, C. (2008). *Achieving excellence in preschool literacy instruction*. Guilford Press.
- Kraska, J., & Boyle, C. (2014). Attitudes of preschool and primary school pre-service teachers towards inclusive education. *Asia - Pacific Journal of Teacher Education*, 42(3), 228-246.
- Lindahl, M. G., & Folkesson, A. (2012). ICT in preschool: Friend or foe? The significance of norms in a changing practice. *International Journal of Early Years Education*, 20(4), 422-436.
- Lindeman, K. W. (2013). Response to intervention and early childhood best practices: Working hand in hand so all children can learn. *Young Children*, 68(2), 6.
- Mathes, P. G., Denton, C. A., Fletcher, J. M., Anthony, J. L., Francis, D. J., & Schatschneider, C. (2005). The effects of theoretically different instruction and student characteristics on the skills of struggling readers. *Reading Research Quarterly*, 40, 148–182.
- Nemeth, K. K., & Simon, F. F. (2013). Using technology as a teaching tool for dual language learners in preschool through grade 3. *Young Children*, 68(1), 48-52.
- O'Meara, J. (2011). *RTI with differentiated instruction, grades 6-8: A classroom teacher's guide*. Corwin.
- Parsons, S. A., Dodman, S. L., & Burrowbridge, S. C. (2013). Broadening the view of differentiated instruction. *Phi Delta Kappan*, 95(1), 38-42. doi:10.1177/003172171309500107
- Scigliano, D., & Hipsky, S. (2010). 3 ring circus of differentiated instruction. *Kappa Delta Pi Record*, 46(2), 82-86. doi:10.1080/00228958.2010.10516699
- Smit, R., & Humpert, W. (2012). Differentiated instruction in small schools. *Teaching and Teacher Education*, 28(8), 1152-1162.
- Tobin, R., & McInnes, A. (2008). Accommodating differences: Variations in differentiated literacy instruction in grade 2/3 classrooms. *Literacy*, 42(1), 3-9.

- Tobin, R., & Tippett, C. D. (2014). Possibilities and potential barriers: Learning to plan for differentiated instruction in elementary science. *International Journal of Science and Mathematics Education*, 12(2), 423-443. doi:10.1007/s10763-013-9414-z
- Tomlinson, C. A. (2005). *How to differentiate instruction in mixed ability classrooms* (2nd ed.). Pearson.
- Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom*. ASCD.
- Tomlinson, C. A., & Moon, T. R. (2013). *Assessment and student success in a differentiated classroom*. ASCD Publications.
- Utah Education Network (2003). *Assessment in the Ealy Childhood Classroom*. Retrieved from <http://www.uen.org/k-2educator/assessment.shtml>
- VanTassel-Baska, J., Xuemei Feng, A., Brown, E., Bracken, B., Stambaugh, T., French, H., . . . Bai, W. (2008). A study of differentiated instructional change over 3 years. *Gifted Child Quarterly*, 52(4), 297-312. doi:10.1177/0016986208321809

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