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This is a post-peer-review, pre-copyedit version of a chapter published in

Book                      International Perspectives on Diversity in ELT

DOI                              The final authenticated version is available online at  
10.1007/978-3-030-74981-1\_12

CITATION                      Roiha A., Polso J. (2021) The 5-Dimensional Model: A Finnish Approach to Differentiation. In: Banegas D.L., Beacon G., Pérez Berbain M. (eds) International Perspectives on Diversity in ELT. International Perspectives on English Language Teaching. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-74981-1\\_12](https://doi.org/10.1007/978-3-030-74981-1_12)

## The 5-dimensional model: A Finnish approach to differentiation

### Introduction

Due to trends in inclusive education, teachers are often faced with increasingly diverse and heterogeneous classes that cannot be effectively taught by simply following a one-size-fits-all approach. Consequently, recognising students' individuality and uniqueness in learning has started to receive more attention in many educational contexts across the world. However, attending to learners' individual needs poses its challenges to teaching. Differentiation is often presented as a solution to this predicament and is considered to be one of the key features in inclusive education. In short, differentiation is a pervasive pedagogical approach that transcends all teaching (Tomlinson, 2014) and that aims to accommodate and cope with the diversity of students (Suprayogi, Valcke, & Godwin, 2017). It encompasses a myriad of practices that teachers can use to support the learning and even upbringing of each student.

This chapter endeavours to respond to the theme of diversity in English language teaching through differentiation. Initially, we will discuss the theoretical underpinnings of differentiation. We will then present our *5-dimensional model of differentiation* (hereafter 5D model) which we have created in the Finnish educational context.

## Theoretical background of the 5D model

Differentiation is not a theory of its own but rather a synthesis of several theoretical perspectives. The 5D model builds on the theoretical concepts of *constructivism*, *zone of proximal development*, *multiple intelligences* and *motivation*. Differentiation can be seen to rely on the constructivist approach to learning, according to which students actively construct their learning. This individual process is influenced by their prior knowledge (Rauste-von Wright, von Wright, & Soini, 2003). It is important that teachers are aware of students' pre-understanding of a topic and approach their learning individually. Zone of proximal development (hereafter ZPD) is a concept by Vygotsky (1978) that relates to students' individual learning. Vygotsky (1978) defines ZPD as the distance between a student's actual development level and their potential development level attainable under the guidance of their teachers. The 5D model advocates that teachers become aware of their students' ZPD to provide them with appropriate challenges. Therefore, in ideal circumstances, every student would always work on their individual ZPD. Gardner's (2008) theory of multiple intelligences suggests that human intelligence can manifest in nine different forms. Whilst suffering from the lack of empirical evidence, the theory nevertheless underscores the diversity of learners and how teaching should cater for the needs of all students, which is also one of the postulates of the 5D model. Also motivation (e.g., Dörnyei & Ushioda, 2013) underpins differentiation as differentiated teaching is based on students' interests. When students are interested in what they are learning, they are also more inclined to face challenging learning situations (Nakamura & Csikszentmihalyi, 2009).

One of the most influential conceptualisations of differentiation is that of Tomlinson (2014) who defines differentiation as a proactive teaching approach that endeavours to maximise each student's learning. Tomlinson

(2014) argues that teachers can modify content, process, product or learning environment based on students' readiness, interests and learning profiles. By content, Tomlinson (2014) refers to the aims students are expected to reach and the materials used to achieve this. Process, in turn, relates to the types of activities students will engage with to form an understanding of the topics discussed whereas product represents what students have learnt.

Tomlinson's (2014) views of differentiation as a pervasive and student-centred teaching approach are also underpinning the 5D model (Section *The 5D model in practice*). However, the 5D model aims to offer a more concrete and tangible instrument for implementing differentiation than Tomlinson's (2014) more theoretical conceptualisation.

Other scholars who have influenced the 5D model are Thousand, Villa and Nevin (2007). They argue that ideally differentiation adheres to the universal design for learning (hereafter UDL) approach. According to Thousand et al. (2007), in order to differentiate, teachers must gather information about the students and based on that, proactively design the content, product and process in their teaching. The UDL approach emphasises the importance of getting to know one's students and constantly revisiting one's teaching. In that way, the UDL creates a cycle in which gathering information about the learners works as a premise. When differentiation is defined in a broad sense (e.g., Tomlinson, 2014), it resembles UDL as they can both be seen as proactive approaches in which teaching is made accessible for all learners. Similarly, the 5D model perceives differentiation as an ongoing and constantly evolving process. Like Thousand et al. (2007), we also want to highlight the importance of knowing one's students well as a starting point of differentiation.

The 5D model in practice

Practitioners seem to understand differentiation somewhat differently and find it challenging. Typically mentioned challenges include lack of time and resources, large class sizes and lack of knowledge of effective differentiation methods (e.g., Roiha, 2014; Tomlinson & Imbeau, 2010). Particularly novice teachers often feel that they lack the appropriate knowledge to differentiate purposefully (van Geel et al., 2019). The primary aim of the 5D model is to provide both pre- and in-service teachers with an easy-to-use framework for implementing differentiation.

The 5D model of differentiation is not a scientific framework but rather a practical tool for differentiation. It relies on the notion that differentiation is implemented holistically in five dimensions of teaching which are *teaching arrangements*, *learning environment*, *teaching methods*, *support materials* and *assessment*. The 5D model progresses from general to specific. First, it is essential to ensure that the general teaching arrangements and learning environment support the learning of each student before moving on to differentiating more specifically in teaching methods or with support materials. Also assessment has a central role in differentiation. Only when the support in all the other dimensions is in place can students' learning be assessed in a differentiated way. Assessment measures the students' progress in relation to their individual goals. It guides the teaching and gives vital information to teachers in terms of differentiation. In the 5D model, each dimension is informed by the students and their individual characteristics, such as *learning profile*, *self-esteem*, *interests*, *readiness*, *needs*, *motivation*, *personality* and *history*. The model is not tied to any specific subject but can be applied in all education (Figure 7.1).

INSERT FIGURE 7.1 ('THE 5-DIMENSIONAL MODEL OF  
DIFFERENTIATION (ADAPTED FROM ROIHA & POLSO, 2020)')  
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The model has been studied using a small-scale survey with 40 Finnish teachers (Laari, Lakkala, & Uusiautti, 2019). The study showed that teachers focused predominantly on differentiation of teaching methods, learning environment and assessment. The least employed dimension was teaching arrangements. However, on average, all the dimensions received attention consolidating the proposition that the 5D model covers the areas of differentiation in a comprehensive way (Laari et al., 2019). Next, we elaborate on the different dimensions of the 5D model and outline several differentiation practices in each dimension with respect to English language teaching.

#### Dimension 1: Teaching arrangements

The first dimension in the 5D model is teaching arrangements by which we mean various macro-level differentiation practices that can be implemented both within and between classes. In this section, we focus on *flexible grouping, co-teaching, remedial teaching, learning assistants* and *part-time special-needs education*.

Flexible grouping is a teaching arrangement in which students are temporarily grouped based on certain criteria such as learning abilities, learning styles, social relationships or interests. Although the research results on flexible grouping differ (e.g., Tieso, 2005), we have found it to be an effective method to acknowledge the diversity of learners. Flexible grouping does not aim at permanent homogeneous groups. It is important that the teaching in the groups is differentiated and tailored based on the students' needs. The teacher can, for instance, group the students based on their learning styles and instruct each group in a more personalised way while the others are working on more mechanical and independent activities.

Flexible grouping is a natural method to use when practising oral communication in English language. Sometimes students can be grouped

based on their interests, and at other times, based on their ability levels. The groups can then engage in conversations about their preferred topics at an appropriate level. For some students, topics or vocabulary can be given beforehand as homework. In addition to interests and abilities, students can also be grouped based on their learning preferences. One group can consist of students who prefer to study a textbook chapter through drama while another group is engaging with the chapter using computers. The idea of flexible grouping is that the groups are not fixed but rather their composition is changed frequently. The grouping should not be stigmatising, and it should not have a negative effect on students' learner self-image, which can easily happen with permanent homogeneous grouping.

Another teaching arrangement, which pertains to flexible grouping, is co-teaching. In the literature, the definition and practices of co-teaching vary and concepts such as supportive teaching, parallel teaching, complementary teaching or team teaching are often used interchangeably (e.g., Thousand, Villa, & Nevin, 2006). By co-teaching in the 5D model we mean all forms of teaching in which two or more teachers simultaneously teach in the same classroom. Similarly to flexible grouping, the advantages of co-teaching have not been indisputably proven. A few meta-analyses, however, seem to indicate that co-teaching is a beneficial approach concerning students' learning outcomes (e.g., Murawski & Swanson, 2001; Scruggs, Mastropieri, & McDuffie, 2007). Positive results on co-teaching have been found also in Finland (Ahtiainen, Beirad, Hautamäki, Hiltavuori, & Thuneberg, 2011). In English lessons, the subject teacher can practise co-teaching with the classroom teacher or special-needs teacher. From the perspective of differentiation, co-teaching enables the teacher to focus on individual students more which helps the teacher to know the students better and thus directs future differentiation. Students also benefit from both teachers' expertise and the teaching can be more versatile even when the class-size consequently increases. For instance, the teacher who has a better

knowledge of English can instruct a grammar activity while the more artistically-oriented teacher can go through a topic using drama or visual arts.

Remedial teaching is another functional teaching arrangement. Its purpose is to prevent and mitigate learning difficulties. Remedial teaching should be provided to all learners who have (occasional) difficulties in learning English. In Finland, the Basic Education Act (628/1998) obligates teachers to arrange remedial teaching to all students who have temporarily fallen behind in their studies. The most common way to implement remedial teaching is to reactively provide additional guidance when certain difficulties have been observed. However, it is often useful to provide remedial teaching proactively. The teacher can go through a grammatical feature or a textbook chapter in advance to pre-empt learning difficulties and provide a student with a better grasp of the content covered in lessons. An alternative to traditional remedial teaching is to arrange students' access to different year-level English lessons. In most syllabi, English follows a spiral structure, that is, certain themes are covered in different grade levels in different breadth and depth. For instance, a Grade 5 student who struggles with the language can join the Grade 3 English lessons and consolidate their understanding of a certain grammatical structure. Conversely, a student in need of extension can join a higher grade level to receive extra challenges and more appropriate teaching. If resources are scarce, older or high-performing students can be utilised in remedial teaching. Teaching others both strengthens the content knowledge of the high-performing student and improves their social skills, while simultaneously serving as remedial teaching for the weaker student.

Learning assistants provide a valuable resource for teachers in terms of differentiation. Learning assistants are very common in Finland since in 2015, there were approximately 7500 learning assistants working in Finnish schools. In 2018, there were around 2200 comprehensive schools (Grades

1–9), i.e., on average 3 to 4 learning assistants work in each Finnish school. Learning assistants are usually educated professionals who can effectively support the learning of both weak and gifted students. Learning assistants also enable the use of flexible grouping or co-teaching. As an example, learning assistant can carry out a mechanical activity to the rest of the class while the teacher is simultaneously instructing a small group of students who need extra assistance.

Part-time special-needs education is a Finnish idiosyncrasy, which we would like to highlight as an excellent teaching arrangement enabling differentiation also in English language. Part-time special-needs education means that a student receives temporary support from the special-needs teacher either in-class or outside the classroom. Finland has a strong culture of special education. In academic year 2017–2018, nearly a quarter of comprehensive school students, i.e. 22 %, received part-time special-needs education (Official Statistics of Finland, 2018). It is even proposed that part-time special-needs education has been an important factor behind Finland’s PISA success (Kivirauma & Ruoho, 2007). Similarly to remedial teaching, according to the Basic Education Act (628/1998), a student who has difficulties in learning is entitled to part-time special-needs education. Even though there is no track record of the subjects in which part-time special-needs education is offered, typically special-needs resources are allocated to academic subjects such as languages. The struggling students can for instance cover a grammar topic or textbook chapter in the guidance of the special-needs teacher. In Finland, the special-needs teacher also periodically tests all the students to detect for instance dyslexia and to prevent students from developing a more severe learning difficulty later on.

#### Dimension 2: Learning environment

The second dimension in the 5D model relates to learning environment, which we have broadly divided into *physical* and *psycho-social*

*environments*. It is important to pay attention to both of them, as they can have a significant impact on students' learning (Brooks, 2011; Yeager & Walton, 2011).

Physical learning environment should always be based on the students' needs. Differentiation is best practised in foreign language classrooms which have places for a wide range of work, for instance, writing, reading, individual work and group work. The ideal classrooms are easily modifiable and adaptable to different learning situations. In truly differentiated classrooms, students do not necessarily have their own named places, but the current place can be selected based on the type of work they are doing. As profound differentiation is a whole school approach, different classes of the school can be equipped differently. For example, one class can have a setting that fosters group work while another class can have a lot of information technology equipment. In this way, teachers can also practise flexible grouping and make use of the different classrooms more effectively.

When the general physical learning environment is in order, it is easier to modify the learning environment of an individual student. Students can for instance have a list of English sight words or high frequency words laminated on their desks or their seat can be next to a wall with other important language visuals. An ideal language classroom has a lot of support material on display. Tourism and marketing material, such as posters with slogans or tourist magazines offer a visual and easy access to written language. Also comics or children's books are practical. Naming and labelling everyday objects or for example colours in the classroom might benefit students. It is important to make sure that the material is clearly organised and on its place and that the overall view of the classroom is calming rather than excessive.

Regarding the psycho-social learning environment, diversity and different solutions are normalised in differentiated classrooms. The teacher plays an important role in creating such an atmosphere in the classroom.

Differentiation entails that not all students need to work on the same tasks or in the same way. It is important to verbalise the different practices and the reasons behind them to the entire class. For instance, teachers can explain why some students are using audio books and others computers instead of a textbook. Talking openly about the different needs of students promotes the acceptance of difference and normalises diversity.

Collaborative learning and the use of different groupings enhance positive classroom atmosphere. Particularly in English lessons, speaking often causes anxiety in students. Therefore, it is important that the psychosocial learning environment promotes students' feeling of safety to speak and use the language. Teachers can also support the active participation of individual students by using small-groups and by paying attention to students' affective features when forming the groups.

### Dimension 3: Teaching methods

The third dimension of the 5D model covers teaching methods. Particularly suitable for differentiation are student-centred teaching approaches such as inquiry- and phenomenon-based learning (e.g., Murdoch, 2015; Symeonidis & Schwarz, 2016). These approaches naturally direct students towards transdisciplinary learning which is the current trend in many educational contexts. Several teaching methods can be used within the framework of the above approaches. For instance, projects allow for more individualised and student-centred learning than traditional teaching. Projects also enable to set individual learning objectives or to use collaborative learning. They support students' understanding of themselves as individual learners with specific strengths. The working time with projects is often flexible. Some students may need several weeks to complete their project whereas others might finish theirs in only a week. The product of the project can also vary, and it can take the form of a recording, video, poster or PowerPoint presentation

based on students' skills, abilities and preferences. With clear guidelines, projects can be used to practise certain language features.

Another differentiated teaching method, which bears similarities to traditional project work, is what we have labelled *contractual project work*. The idea is that students set individual goals for themselves (in the guidance of their teacher), plan their learning process and make a learning schedule for themselves. Contractual project work calls for and also supports self-directness and learner autonomy and has to be carefully scaffolded by the teacher. The method is very independent and individual, and students can progress at an individual pace. Contractual project work can be done either individually or in pairs or groups. Both ways suit language teaching extremely well. Students can, for example, decide which grammar form or vocabulary they want to study in a given week and how to organise this.

Station work is a functional teaching method, in which students work in different stations for a certain period of time. This method enables individual progress as well as the use of peer support and collaborative learning. From the standpoint of differentiation, the stations can contain differentiated work and the groups can be formed with differentiation in mind. The teacher can focus on supporting the stations or the groups that need more assistance while the others can work more independently. Some stations can be dedicated to scaffolded group discussions while others focus on reading or writing. There can also be an ICT station and game station in which students practise the language through play. The time frame for this working method can range from one lesson to a week depending on the extent of the stations.

Within all the above-presented methods, teachers can differentiate their teaching focusing more specifically on the four main language skills: *listening, speaking, writing* and *reading*. Listening comprehension can be differentiated in various ways. It is important that teachers pay attention to their own speech. By altering the complexity of the language, the teacher

can take all learners into account better. A topic can first be introduced using complex language and after that in a more simplified way. It is useful to support important speech such as instructions or the main message, for instance, with visuals, gestures or expressions. When listening to texts, students can be given vocabulary lists with most important words or even the entire transcript of the text which they can follow while listening. Under some circumstances it can be justified to provide the students with the transcript both in English and in the students' first language. The transcripts can also be given to students to read at home before the listening activity at school.

In differentiated classrooms, the students who struggle with speaking can be granted the opportunity to answer in single words or sometimes rely on their first language which is in line with the principle of translanguaging (Nikula & Moore, 2019). Students can also be given sample sentences or vocabulary lists to support them in various conversation exercises. In general, students feel safer when they work in small groups (Pihko, 2007). The groups can occasionally be formed so that the weaker learners are grouped together in order for the teacher to support them more intensively. Students with difficulties speaking English can also be allowed to record their reading or oral production at home and give the recording to the teacher to be listened to at school.

Although the emphasis in foreign language learning should be on oral production, writing is still an important skill that needs practising in English lessons. Similarly to speaking, teachers can differentiate the writing objectives of the students. Instead of requiring full sentence production, some students' goal could simply be to produce single words in English. From the perspective of differentiation, open-ended writing assignments are particularly suitable to use as they can be completed according to the students' individual abilities. When writing an essay, the most gifted students can produce complex texts with multiple subordinate clauses

whereas the weaker students can only write in simple sentences or even in bullet points.

Reading in a foreign language is a challenging and tedious task for many learners. Teachers can take several measures to alleviate this process. Firstly, it is important to provide students with texts that are at an appropriate level for them. With weak readers, common texts often need simplification. Teachers can shorten and simplify the texts for instance by replacing difficult words with easier synonyms or by deleting the subordinate clauses that are not essential to the text. Teachers can also make annotations to the text or underline, bold, italicise or translate the key words and phrases. Students can also be given glossaries or word lists to support their reading. Sometimes these can be made by a gifted student as a differentiated activity. Simplified texts can be used also in the years to come, which will save time for further preparation. Often it is good to pay attention to visual aspects of the text (e.g., font size, subheadings, diagrams) and to teach reading strategies for the students. One can also utilise students' own texts which better engages them in learning.

#### Dimension 4: Support materials

The penultimate dimension of the 5D model is support materials which can be used to aid students' learning. English language classrooms should be equipped with plenty of language related materials that provoke students' interest in the language such as games, maps, posters, magazines and books in English. Individual student's learning can be supported with a variety of tools depending on the student's needs. For instance, for students with Attention Deficit (Hyperactivity) Disorder features, reducing stimuli by using partitions, noise-cancelling headphones or even wearing a hood or a cap in the lesson can make them concentrate on learning. Likewise, for example, seating cushions or structuring one's work with hourglass or a time timer can help to focus more actively.

Communication is a crucial part of language learning. Concurrently, speaking and especially English pronunciation is often the most challenging part of language learning for many students. Sometimes students can have difficulties with their oral motor functions, particularly if the phonemes of one's first language differ a lot from the English phonemes. There are a variety of practical tools to support and direct students' pronunciation. For example, a mirror can be used for this purpose. With the mirror, students can observe the position of their tongue, for example during sounds /θ/ (e.g., thing) and /ð/ (e.g., other). Another useful way to demonstrate the correct pronunciation, keeping safety measures in mind, is to use a candle and have the students observe how the flame flickers when pronouncing certain sounds. Students can also use digital devices to record and listen to their own speech and compare it to a model recording. Video recordings are an excellent tool also in practising public performance and presentations with more advanced language learners.

ICT in general offers a wealth of possibilities for differentiation. Some students can use computers and headphones to listen to the texts multiple times while others carry on with the lesson. Audio recordings of the texts can be given to weak students before the lessons so they can familiarise themselves with the texts in advance. The students who feel anxious about speaking in front of the class can record their speech on their phones at home and play it at school. For writing, most computer writing programmes have a spell-check function that highlights spelling mistakes and guides the students' production. There is also an abundance of online exercises available that can be used in differentiation for different students.

#### Dimension 5: Assessment

The final dimension of the 5D model is assessment, which guides students' learning more than any other factor (Hayward, 2012). For that reason, it is pivotal that differentiation also extends to assessment. In Finland,

differentiation is very much embedded in assessment as the Finnish National Core Curriculum for Basic Education (2014) states that “even mild learning difficulties and any shortcomings in the students’ skills in the language of instruction [...] should be taken into account when planning and implementing assessment and demonstration situations” (Section 6.2).

Assessment is often roughly divided into *pre-assessment*, *formative assessment* and *summative assessment*. They all have different purposes, but similar methods can be used in all of them. To ascertain students’ prior knowledge and level of ability, teachers must utilise pre-assessment which is a prerequisite of effective differentiation. Only by knowing the students’ current level, teachers can plan and implement their teaching purposefully. Based on the students’ pre-knowledge, individual goals can be set, and their progress can later be assessed in relation to these goals. Formative assessment can also be translated as assessment *for* learning as its function is predominantly to support and guide students in their learning process. Summative assessment, on the other hand, means assessment *of* learning and is usually implemented at the end of a teaching period (Harlen, 2012).

In English language teaching, multiple assessment methods can be used in all of the above-mentioned forms of assessment. Too often teachers still tend to rely on a written exam at the end of a unit. In accordance with the 5D model of differentiation, assessment should expand also to other methods of assessment, such as portfolios, learning journals, presentations, projects, homework or pedagogical discussions. If a teacher chooses to use exams as the central means of assessment, it is important that the exams and the entire exam situation is differentiated. For weak students, it is beneficial to limit the content they need to learn and create the exams accordingly. That way the students do not need to revise the entire course book but only the parts they will be tested on. Other ways to take students’ individuality into account is to provide them with individual exams which have questions that are at an appropriate level. For instance, the learners who struggle with

English can have exams that contain more recognition instead of production and application exercises. Students should also have the opportunity to demonstrate their learning orally which is often in line with the objectives of teaching. That is, typically the primary goal is to learn how to orally communicate in the language while the exams often focus mostly on assessing reading and writing. During the exam situation, students should also be provided with the assistance that they require. This could entail extra time, added teacher assistance or even a group or take-home exam.

Self-assessment is emphasised also in differentiation. The European Language Portfolio (hereafter ELP) is a good example of differentiated self-assessment in foreign languages. In it, the learners reflect on their language learning and intercultural experiences. The ELP consists of a language passport, language biography and dossier (Council of Europe, n.d.). Each learner can work on the ELP according to their individual abilities and it can take the form the learner wants, thus promoting individuality and differentiated working culture.

It is important to keep in mind that not all students need to be assessed in the same way or even at the same time of the learning process. Some students can benefit from a formative pedagogical discussion halfway the unit whereas for the others, the teacher can rely on them progressing in their learning as expected. Similarly, even though the majority of the class can demonstrate their learning with a written exam, some students can be given the option to do so with a recording or video. Differentiated assessment methods do not automatically mean differentiated goals or individualised curriculum. In general, students should be given the chance to be tested at their own level rather than making them take a test that they will fail.

## Conclusion

This chapter addressed differentiation in English language teaching. We have endeavoured to demonstrate how the 5D model can serve as an exemplar for the implementation of differentiation in various educational contexts. The model has been created in the Finnish education system and therefore some of the practices described in this chapter may not be feasible in other contexts as such. However, it is important to bear in mind that the model only provides a framework for differentiation and the various differentiation strategies in each dimension can and should vary according to the context. For example, teachers can use various assessment and teaching methods, as long as they are approached from the perspective of differentiation. The dimensions of the model are also emphasised differently in various contexts depending on the resources available and the needs of the students. In some schools, it is possible to implement very systematic and extensive differentiation with teaching arrangements, while in others differentiation focuses more on teaching methods and support materials. The main purpose of our model is to foster a mindset of differentiation whereby one uses the differentiation practices feasible in one's own school setting. For instance, with regard to support material, their purpose is to facilitate students' learning. Therefore, it is not necessary to use a professional seat cushion to help concentrate if the student's own pillow serves the same purpose.

We acknowledge that the lack of time poses its challenges to differentiation. Our model is meant to provide a wide range of ideas on how to differentiate in several dimensions. In an ideal situation, all the dimensions should receive equal attention but this is not always possible in practice. Therefore, we encourage teachers to focus first on one or two dimensions and start to gradually build their toolkit of differentiation practices. Moreover, differentiation is partly a value judgement; teachers must decide how much time they spend on certain things. It is also

important to acknowledge different levels of differentiation. If teachers adopt differentiation as a part of their teaching philosophy, they approach all teaching with students' individuality in mind and use small-scale differentiation practices, such as extra time or differentiated homework, flexibly and spontaneously.

We argue that effective differentiation requires a change in the way traditional education is perceived. At a school level, differentiation calls for a more collaborative working culture in which teachers and other professionals truly cooperate. At the classroom level, not all students need to work on the same tasks, in the same way or at the same time. For the 5D model to yield the best outcome, it is equally important to designate resources for differentiation. For instance, co-teaching or support materials require financial investment. This requires commitment and participation also from the school administration. We believe that the 5D model can respond to student diversity and provide English language teachers with tools to face heterogeneous classrooms. Profound differentiation helps each learner to study in the mainstream class and to reach their maximum potential in English language learning.

### Suggested further reading

Peterson, J. M., & Hattie, M. M. (2010). *Inclusive teaching. The journey towards effective schools for all learners*. Boston: Pearson Education.

This book discusses inclusion thoroughly and from several viewpoints. The book also provides a lot of practical examples of how inclusion can be supported in schools.

Roiha, A., & Polso, J. (2020). *How to succeed in differentiation? The Finnish approach*. Woodbridge: John Catt Educational Ltd.

This book discusses the 5D model in more detail and offers more concrete ways to differentiate one's teaching.

Tomlinson, C. A. & Moon, T. N. (2013). *Assessment and student success in a differentiated classroom*. Alexandria: ASCD. This book focuses on differentiated assessment which is a topic that challenges many teachers. The book is well structured and covers several aspects of differentiation such as pre-assessment, ongoing assessment and summative assessment.

## Engagement priorities

- Teachers often find differentiation challenging. What challenges can you identify for successful differentiation? How could you personally tackle these challenges?
- In your teaching, do you mostly focus on supporting the learners who have learning difficulties or the learners who need extra challenges? Can you come up with ways to also support the other end of the continuum?
- Can you think of differentiation methods which would benefit all students in the classroom?
- When reflecting on the 5D model, do you find it to be a useful and tangible approach to differentiation in your respective country and educational context? Why/why not?

## References

- Ahtiainen, R., Beirad, M., Hautamäki, J., Hiltavuori, T., & Thuneberg, H. (2011). *Samanaikaisopetus On Mahdollisuus. Tutkimus Helsingin Pilottikoulujen Uudistuvasta Opetuksesta*. Helsinki: Helsinki Department of Education.
- Basic Education Act 628/1998. Available at:  
<https://www.finlex.fi/fi/laki/kaannokset/1998/en19980628.pdf> [Accessed 24/1/20.]
- Brooks, D. C. (2011). Space matters: The impact of formal learning environments on student learning. *British Journal of Educational Technology*, 42(5), 719-726.
- Council of Europe. (n.d.). What is the ELP? Available at:  
<https://www.coe.int/en/web/portfolio/introduction> [Accessed 21/1/20.]
- Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching motivation* (2<sup>nd</sup> ed.). New York: Routledge.
- Finnish National Core Curriculum for Basic Education. (2014). (Fourth Edition). Helsinki: Finnish National Board of Education.
- Gardner, H. (2008). *Multiple intelligences: New horizons*. New York: Basic Books.
- Harlen, W. (2012). On the relationship between assessment for formative and summative purposes. In J. Gardner (Ed.), *Assessment and learning* (pp. 87-102). London: Sage.
- Hayward, L. (2012). Assessment and learning: The learner's perspective. In J. Gardner (Ed.), *Assessment and learning* (pp. 125-139). London: Sage.
- Kivirauma, J., & Ruoho, K. (2007). Excellence through special education? Lessons from the Finnish school reform. *International Review of Education*, 53(3), 283-302.
- Laari, A., Lakkala, S., & Uusiautti, S. (2019). "For the whole grade's common good and based on the student's own current situation": Differentiated teaching and the choice of methods among Finnish

- teachers. *Early Child Development and Care*. Advance online publication. doi:10.1080/03004430.2019.1633314
- Murawski, W. W., & Swanson, H. L. (2001). A meta-analysis of co-teaching research. *Remedial and Special Education, 22*(5), 258-267.
- Murdoch, K. (2015). *The power of inquiry: Teaching and learning with curiosity, creativity and purpose in the contemporary classroom*. Northcote Vic: Seastar Education.
- Nakamura, J., & Csikszentmihalyi, M. (2009). Flow theory and research. In S. J. Lopez & C. R. Snyder (Eds.), *The Oxford handbook of positive psychology* (2<sup>nd</sup> ed., pp. 195-206). Oxford: Oxford University Press.
- Nikula, T., & Moore, P. (2019). Exploring translanguaging in CLIL. *International Journal of Bilingual Education and Bilingualism, 22*(2), 237-249.
- Official Statistics of Finland. (2018). Special education [e-publication]. Available at: [https://www.stat.fi/til/erop/2018/erop\\_2018\\_2019-06-19\\_tie\\_001\\_en.html](https://www.stat.fi/til/erop/2018/erop_2018_2019-06-19_tie_001_en.html) [Accessed 21/01/20.]
- Pihko, M. K. (2007). *Minä, Koulu ja Englanti. Vertaileva Tutkimus Englanninkielisen Sisällönopetuksen ja Perinteisen Englannin Opetuksen Affektiivisista Tuloksista*. Jyväskylä: University of Jyväskylä.
- Rauste-von Wright, M., von Wright, J., & Soini, T. (2003). *Oppiminen ja Koulutus*. Helsinki: WSOY.
- Roiha, A. (2014). Teachers' views on differentiation in content and language integrated learning (CLIL): Perceptions, practices and challenges. *Language and Education, 28*(1), 1–18.
- Roiha, A., & Polso, J. (2020). *How to succeed in differentiation? The Finnish approach*. Woodbridge: John Catt Educational Ltd.
- Scruggs, T. E., Mastropieri, M. A., & McDuffie, K. A. (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children, 73*(4), 392-416.

- Suprayogi, M. N., Valcke, M., & Godwin, R. (2017). Teachers and their implementation of differentiated instruction in the classroom. *Teaching and Teacher Education, 67*(2), 291-301.
- Symeonidis, V., & Schwarz, J. F. (2016). Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland. *Forum Oświatowe, 28*(2), 31-47.
- Thousand, J. S., Villa, R. A., & Nevin, A. I. (2006). The many faces of collaborative planning and teaching. *Theory into Practice, 45*(3), 239-248.
- Thousand, J. S., Villa, R. A., & Nevin, A. I. (2007). *Differentiating instruction: Collaborative planning and teaching for universally designed learning*. Thousand Oaks CA: Corwin Press.
- Tieso, C. (2005). The effects of grouping practices and curricular adjustments on achievement. *Journal for the Education of the Gifted, 29*(1), 60-89.
- Tomlinson, C. A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners* (Second Edition). Alexandria: ASCD.
- Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom*. Alexandria: ASCD.
- van Geel, M., Keuning, T., Frèrejean, J., Dolmansb, D., van Merriënboerb, J., & Visscher, A. J. (2019). Capturing the complexity of differentiated instruction. *School Effectiveness and School Improvement, 30*(1), 51-67.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research, 81*(2), 267-301.