Embracing Individual Differences: Overview of Classroom and Curricular Strategies with Reference to the Hong Kong English Language Curriculum and Assessment Guide

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Abstract

The essay begins with a review of individual differences in cognitive, sociological, and psychological aspects. The idea of individual differences and differentiation as dynamic and multifaceted concepts is subsequently critically reviewed. Then, with reference to the English Language Curriculum and Assessment Guide (2007), various classroom and curricular strategies for catering individual difference are discussed, including the use of assessment, adjusting learning objectives, adapting contents, adjusting teaching process, and using grouping. The potential benefits or problems of each strategy are discussed with reference to current research, the Curriculum and Assessment Guide, and the author's teaching experience. The essay ends with some general recommendations to different stakeholders concerning the implementation of the curricular suggestions.

Key Words

individual differences, instructional strategies, curricular adaptation

Does catering for individual differences mean teaching 31 different curriculums to 31 different students in one classroom? Or does it mean aiming at the "average" and taking the middle ground in content difficulty, depth and width? In practice, it is impossible to devise a curriculum for each student in a class. However, targeting students of medium learning ability leaves many students bored because they are either overwhelmed or under-challenged. So, how should a secondary school English teacher cater for individual differences within mixed-ability classrooms? The English Language Curriculum and Assessment Guide (2007) offers many suggestions. The Curriculum Development Council does call the curriculum "diversified" and notes that it is aimed at catering to the "varied interests, needs and abilities" of learners (Curriculum Development Council [CDC], 2007, p. i). In this essay, ideas surrounding individual differences and differentiation are introduced. Then, the strategies for catering for individual differences such as formative assessment, adapting content, process (electives, direct instruction, and grouping) and product and summative assessment are discussed. Potential benefits or problems of each suggestion are proposed before the essay ends with some recommendations surrounding the implementation of the curricular suggestions.

Individual differences: crisis or opportunity?

Many teachers feel overburdened and stretched in highly heterogeneous classrooms, seeing individual difference as a burden or a problem to be solved (CDC, n.d.). However, instead of aiming to eliminate differences by nurturing students towards a uniform standard, natural individual difference can be an opportunity which opens different ways of delivering the curriculum. Student diversity can be embraced as a useful way of adding variety to classroom practice. Ultimately, the overall aim of the curriculum is to enable every learner to develop English proficiency and unleash potential, not produce similar-looking products (CDC, 2007). This leads to differentiated content, assessment, and teaching methods being governed by the curricular aim (Morris, 1996). However, for real classroom changes to be brought about, individual differences should not continue to be seen as a problem but, instead, viewed as a fundamental curricular aim.

Many scholars agree on the need to cater for individual differences. Taba, when discussing the criteria for choosing curriculum content, for example, emphasized that content must be learnable and related to student interest (Taba, 1962). Similarly, Tyler argued that learning experience must fit student needs and abilities (Tyler, 1949). It should also be noted that ability gaps between students, if left unchecked, might widen as they progress.

Literature review

Several characteristics shared by effective language learners have been identified.

Variation in these factors contributes to different results in second language acquisition. These characteristics include intelligence, aptitude, learning style, personality, motivation, identity and ethnic group affiliation, learner beliefs, and age of acquisition.

Catering for individual differences in learning ability and motivation in Hong Kong schools is an important topic. In Hong Kong, where the clear majority of students must learn English as a second language and approximately a third have English as their primary medium of instruction, students vary widely in cognitive, sociological, and psychological aspects. No two students are identical.

There can be a broad range of differences even within the same classroom. Some aspects (for example, cognitive differences, social differences, psychological differences, learning difficulties or giftedness) might potentially affect teaching and learning, dependent on the availability of different external supports and self-esteem, etc. The idea of individual difference is related to the notion of multiple intelligence, meaning that the intelligence of students is exhibited in various dimensions.

Intelligence, aptitude, and cognitive styles are examples of individual cognitive differences. Some studies have demonstrated that IQ scores are more connected to metalinguistic learning and linguistic analysis than to the communicative capability (Lightbown and Spada, 1999). For example, for students in immersion programs, IQ was found to correlate with L2 reading, language structure, and vocabulary, but not with speaking skills. It is thought that students with high aptitude may learn more easily and faster. Studies have established a clear relationship between performance on language aptitude tests (MLAT) and performance in L2 learning based on grammar, translation, or audiolingual methods (Lightbown and Spada, 1999). When a more communicative approach is adopted, MLAT result seems less related. Group embedded figures tests (GEFT) show that learners with a holistic learning style do better in formal learning, communicative competence, and listening comprehension when compared to learners with more analytic or rational styles. Learning styles can also be categorized into visual, auditory, kinesthetic, or tactile styles.

Students may have different ability or readiness levels. Some learners might grasp a concept while some still need extra teaching. Even the same student may have strengths and weaknesses across different areas. The difference in ability may be due to a difference in working memory, analytic ability, or general intelligence (Molfese, 2002). Some students are better at using conceptual memory and some at using procedural memory when producing English sentences (Hallett et al., 2012). However, the differences are not just quantitative (high and low readiness); the cognitive difference can be qualitative. For example, when learning vocabulary, some students tend to use (both consciously and unconsciously) rote memory while some prefer to use semantic mapping, both of which are effective when used appropriately (Khoii & Sharififar, 2013). Some learners are more

referential and are better at words which name objects, while some are more expressive and better at words about interpersonal interactions and emotions (Goldfield & Snow, 1997). When understanding sentences, some use bottom-up strategies where they construct meaning from individual words, while some are better at top-down strategies where they understand phrases before words (Field, 1998). Even small factors like differences in the movement of eyeballs while reading can affect English learning (Kuperman & Van Dyke, 2011). The pedagogical implication is that a variety of contexts and resources need to be provided, so that students with particular cognitive traits are not unfairly disadvantaged.

Specifically, with reference to Hong Kong, studies agree that there are clear individual differences found in student cognitive ability that affects language proficiency. It was found in two studies that cognitive phonological awareness and visual skills clearly vary between students and that those differences contribute significantly to ability to read English (Chow, et. al, 2005 and Huang and Hanley, 1995). Another study shows a significant variation in general language proficiency in students that is related to cognitive strategies (Bremner, 1999).

Sociologically speaking, students may have different perceptions that include identity, school background, family background, socio-economic status, and family structure. Factors like family divorce, the presence of grandparents, and even birth order can potentially indirectly affect English learning by creating cognitive and psychological implications (Pawlak & Mirosław, 2012).

Specifically, with reference to Hong Kong, studies have not given a clear picture of how sociological factors affect the English proficiency of students. One study showed that the family and socio-economic background of Primary 4 students contributed little to differences in reading ability (HKSAR Government, 2017). However, the reading ability of students has been shown to be affected by the degree of family involvement (HKSAR Government, 2017).

Another sociological factor is identity. One study showed that some students feel uneasy using English because of their Chinese identity, although most see no conflict between ethnic identity and learning English (Liu & Littlewood, 1997). A study of Hong Kong secondary school students brought up after Hong Kong's handover of sovereignty showed that students have different and changing views of the instrumental and integrative value of English, which may affect their language proficiency (Lai, 2005).

Psychological differences between students include those surrounding emotion, anxiety, attitude, aptitude, personality (neuroticism, extraversion, etc.), temperament (adaptability and distractibility, etc.), and motivation. Regarding personality, an active and outgoing student usually performs better when speaking because they seize chances to practice speaking (Wells, 1985). However, in certain contexts, those of a quiet, observant

nature are likely to learn more (Fillmore, 1979). It has been proposed that those who tend to take risks are more likely to make progress in language learning and that motivation is related to the perceived relevance of content (York, 2013). Motivation is also related to the perceived control of students over their performance. If they believe their ability is fixed, they are less motivated than when they perceive ability as malleable and improvable (Skinner, Zimmer-Gembeck & Connell, 1998; Mercer, 2011). Students are also either intrinsically or extrinsically motivated. Another framework for understanding motivation involves categorizing it into integrative and instrumental motivation, respectively related to interest in the communities using the target language and the practical advantages that learning might bring.

Affective factors, like interest, are also psychological. Students with special educational needs (for example giftedness, dyslexia or autism) have different psychological and learning needs (Pawlak & Mirosław, 2012). Anxiety can be both harmful or beneficial depending on several factors (Horwitz et al., 1986). Too much anxiety may hamper working memory and processing functions.

Reports specifically in the Hong Kong context have examined the different psychological traits of students and shed light upon the dynamics of individual difference in different contexts. One study showed that some students, especially those who ended up in universities, have a natural liking for communicative learning activities (Liu & Littlewood, 1997). However, other students do not have a genuine interest in English, especially communicative activities, due to psychological reasons that include low confidence in their ability to speak, the anxiety they feel when speaking, and a sense of unease in impromptu speaking. (Cheung, 2001; Liu & Littlewood, 1997). Another important contributing factor is student attitude and self-assessment (Pierson, Fu and Lee, 1980). Several other factors also contribute to individual difference. One study showed that, in Primary 4, girls had higher reading ability than boys (HKSAR Government, 2017). Another study showed that students taught using English as the medium of instruction enjoyed a better general English reading ability (Tse, 2010).

To conclude, students are different not just quantitatively (rate of learning) but also qualitatively (way of learning). The pedagogical implication is that a variety of contexts and resources needs to be provided, so that different students receive appropriate learning experiences.

Individual differences as a dynamic and multifaceted concept

Student individual difference be a dynamic concept because its factors interplay. Both sociological factors and psychological variables may lead to cognitive differences. The intricate interaction of the factors means that teachers need to assess students comprehensively and should not understand students through just one facet.

A time dimension is also involved. Students may develop different interests as they grow. They might also have different learning styles or have different readiness levels due to their own learning experiences. Therefore, the individuality of a student is not static.

Education should avoid gender-based and racial stereotypes. While gender and race are noticeable differences, these factors should, in no way, be viewed as important unless they affect teaching and learning. Male students, for example, tend to use the English language to talk about themselves, while female students usually tend to use the language to converse interactively. Efficient differentiation should be able to create contexts for both genders to use the language, without causing unfair advantage or disadvantage to any gender (Shehadeh, 1999).

The implemented curriculum, that is what actually happens at the classroom level, might vary considerably from the formal curriculum document. Teachers, ultimately, are the ones that make curricular and instructional decisions about what happens in their classrooms, which might be different from the stipulations of the curriculum. The incongruity between the implemented curriculum and the one set out in the curriculum document might also be a result of differentiation.

Differentiation, in short, is modified instruction which taps into the different needs of students (Good, 2006). Differentiation, however, is not providing each student in every class with different activities. Differentiation can take place with an individual learner, with a small group, or with the entire class (The Center for Comprehensive School Reform and Improvement, n.d.). Differentiation is multifaceted because it is expressed in the form of options and diversities across a range of pedagogical elements: subject content, the process of learning, grouping, products which exhibit learning outcomes, and evaluation approaches (Ornstein & Hunkins, 2009; Tomlinson 1995). Due to differentiation, learned or implemented curriculums may appear to differ significantly from the formal curriculum. Teachers are no long curriculum transmitters, but curriculum adapters (Shawer, 2008).

Use of assessments

Formative assessments are used to give feedback to students. In our context, it is suggested that formative assessment is used to "help teachers review teaching plans and strategies" (CDC, 2007, p. 52). It is important to note that the authors of the curriculum view assessment as a way to inform teachers how to differentiate. For example, before starting a new chapter, data from formative assessments allows teachers to identify the prior knowledge, strengths, and weaknesses of students to help decide on content and teaching methodology.

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Assessments are not necessarily pen-and-pencil tests. Rather, a teacher can pause during instruction to ask questions or discuss progress with learners on a day-to-day basis (Stiggins, 1994; Valencia, 1990). This allows teachers to obtain data allowing adjustment of the learning experience and the provision of additional guidance (Tomlinson, 1995). More conventional definitions of curriculum (for example, those by Tanner & Tanner (1980), Schubert (1987), and Pratt (1980)) include the assumption of an element of preplanning and desired learning experience. In actual classrooms, asking probing questions, providing clarification, and adjustment can be considered part of the pre-planning process. The core of differentiating end products and summative assessments is providing ample options and choices.

Different areas of assessment are mentioned in the curriculum. Students should have chances to demonstrate their learning or achievements by producing end products, which can also often be used for summative assessment (CDC, 2007). The curriculum guide suggests different options. In the elective language art modules, for example, students may choose between creating scripts, short stories, poems, songs, performances, or writing responses to other language art works and putting them in a portfolio (CDC, 2007, p. 37). A range of assessments means allowing students to demonstrate what they have learned in the diverse learning activities. Depending on the choices of individual learners, everyone might have a different product. However, this open-ended assessment might be difficult to implement in schools. One suggestion is to allow students to produce different types of work for a given scenario. For example, teachers can tell students that they need to promote their products to potential customers. Students can then choose to write a leaflet, a script for a commercial, PowerPoint slides, a poster, or even come up with the lyrics of a jingle to fulfill the task requirement.

Written tests can also be differentiated to suit different needs as well. Students might choose from papers with different levels of difficulty (as in the public examination) or choose individual passages that reflect their interests. The level of difficulty might also be adjusted by providing hints or examples. Students who want more of a challenge might attempt optional questions that test higher abilities like creating, evaluating and analyzing. Further, open-ended questions can further enhance different abilities and skills.

Since assessment is a way to assess if learning objectives have been achieved, diversified learning experiences must entail diversified assessment. This is known as performance assessment in which students perform a real-world task. When students are allowed to produce different text types, for example, the teacher can assess them by using Understanding by Design (UbD)—choosing activities and materials that help determine student ability and foster student learning in preference to specific task type-related criteria (Wiggins and McTighe, 2005). This can encourage students to explore real-world tasks in authentic scenarios and engage their higher-order thinking skills. This is in line

with standards-referenced assessment in which student performance is matched against standards that show what students can achieve at a certain level. The rubrics contain written descriptions of different levels of performance, specifying associated abilities.

Two recommendations about assessment are made. First, although summative assessment is commonly used and it is about assessing outcome, it is suggested that both the outcome and process be assessed by using formative assessment. Also, the result of summative assessment could inform planning in the next cycle. Teachers can make use of data from assessments to carry out curriculum planning and adaptation, although it involves changes in the school culture.

Curriculum adaptation: objectives, process, content and grouping

A common method of differentiation is to vary the learning objective for each student. Students and teachers may discuss producing a learning contract containing the individual learning objective (Tomlinson, 1995). In Hong Kong, teachers are also advised by the curriculum guide that differentiation should not adversely affect the learners' progress towards the learning targets and objectives. In practice, careful planning and implementation is required to achieve a balance between taking care of individual needs and ensuring all students achieve their designated learning goals. Adaptation can also include adjustments to the way the curriculum is organized and the pace of learning, etc.

After knowing student needs, subject content can then be adjusted and schools select can relevant materials to enhance the relevance of the content to student lives and future aspirations (CDC, 2007). Material adaptation can be achieved by using authentic materials, such as newspaper articles about their community in preference to a set text. Teachers can change the level of difficulty, width, and breadth of content to increase or decrease the level of challenge according to the needs of students. Therefore, a variety of content and materials can be used to cater for a range of ability levels and interests. Student needs should be considered in the content decision-making stage of lesson design.

Although nowadays direct instruction is not seen as effective a method of differentiation as using inquiry or co-construction, it can be useful in explaining and demonstrating knowledge with sufficient differentiation (CDC, 2007). Rather than requiring students to simply listen, direct instruction, if used appropriately as an instructional technique, can bring about a wealth of experience, diverse learning paths, and cater for different learning styles. Teachers can tap into different types of intelligence and ensure multi-sensory involvement to cater for different learning styles. Strategies include passing around artifacts, showing video clips, graphs and flash cards, conducting polls, and having conversations with students. According to Tyler (1949), the same objective can be

reached by multiple learning paths and a rich experience is more useful than a monotonous range of activity. Teachers need to know what kinds of activity are more likely to attract a particular type of learner before using these activities to aid direct instruction (Huitt, 1997).

The curriculum guide suggests the use of different kinds of class groupings for active learning and to promote generic skills like communication (CDC, 2007). In actual school environments, teachers may choose to group students by forming homogenous or heterogenous groups based on ability. Grouping learners of similar ability levels together, for example, allows teachers to provide support, challenge, or add complexity by varying hints (CDC, n.d.; Tomlinson, 2000). However, homogenous grouping can be problematic. Research shows that only learners assigned to the high-ability groupings benefit (Huitt, 1997). This might be because the expectations of teachers, and therefore the quality of instruction, may be lower in low-ability groups (Huitt, 1997). For example, teachers are more likely to use disorganized questioning and instructional techniques with lower ability groups (Huitt, 1997). This is what teachers ought to be cautious about. Further, when students realize that they have been assigned to a average or low ability group, their self-esteem or confidence may decline (Jere & Good, 1986). This might create a vicious circle (Jere & Good, 1986). Also, when activities are not properly monitored, students in low ability groups may reinforce mistakes and contribute to iatrogenic effects.

To reduce the stigmatizing effect, it is suggested that teachers do not reveal which group is the high or low ability one. In classes where differentiated tasks and materials are used, it is recommended that teachers substitute names for the groups, like naming the groups after animals or colours. Teachers need to know that their expectations of students can be different, but not perennially low.

Heterogeneous grouping, which is not emphasized in the curriculum guide, can also help teachers address individual difference. Heterogeneous grouping highlights individual difference by putting students of various abilities in the same group. Abler students can help the less able by peer learning or cooperative learning (Huitt, 1997). Students can also acquire learning strategies like monitoring and planning from each other. Heterogeneous groups may bring with them better student achievements than homogeneous groups, partly because higher-ability students can help lower-ability students and deepen their own learning while teaching (Lou, et al, 1996). Scholars like Slavin (1995) have promoted heterogeneous grouping to promote harmony between students. However, the ideal situation of students being cooperative does not always occur. In practice, some teachers may be sceptical to heterogeneous grouping because problems arise when students take a free-ride if they let stronger members dominate tasks (*Salomon* and Globerson, 1987). In addition, those students contributing more might benefit more from group work, widening the gap between students. Students of higher proficiency might also experience inflated self-esteem, as lower ability students begin to feel inferior to their peers (Esposito, 1973). This might cause students to behave uncooperatively during the discussions. Ultimately, the potential problems may outweigh potential benefits (Esposito, 1973), but recent research has established effective mitigations for such problems, such as teaching students collaborative skills before discussions (Gillies and Ashman, 1996) and employing specially-designed computer-moderated discussions (Swan, 2001). It is worth noticing that using ability as the sole grouping criterion may be narrow-minded. It might be wiser to occasionally group students with common interests together to increase motivation (Willis & Mann, 2000), since some activities are readiness-oriented while some are interest-oriented (Tomlinson, 1995).

The use of information technology in learning activities is recommended in the curriculum guide (CDC, 2007). Multimedia presentation tools make lessons more motivating and engaging (CDC, 2007). When compared to traditional textbooks, tools like computer programs, internet tools, or smartphones can offer more modes of participation, such as increasing interactions and student inputs and responses (Lam & Wan, 2010). Multi-modal participation is related to a multi-sensory experience that suits the needs of learners with different learning styles. Information technology can be further deployed to record, track, and analyze the progress of students (Pachler, Daly, Mor & Mellar, 2010). Tests made with the help of computers can help teachers check answers instantly, allowing a rapid identification of which students are able to move ahead and which are not. This facilitates each student learning at a suitable personal pace, instead of having to catch up with or wait for others.

The curriculum guide mentions the importance of catering for learner diversity, including gifted and academically advanced students. It should be noted that these students do not automatically achieve without support. Indeed, if not given specific support, they may under-achieve (Whitmore, 1980). They may benefit from curricular compacting or acceleration to avoid boredom (Hong Kong Academy for Gifted Education). In assessments or classroom interactions, gifted students can be challenged with tasks requiring higher-order thinking skills such as those noted in the upper end of the Bloom's taxonomy, like creating and analyzing (Tomlinson, 1995). It is important to note that gifted students need more challenging tasks (qualitative difference), but not more tasks (quantitative difference), since demanding extra work might seem hollow or punitive (Tomlinson, 1995).

Case 1: A primary school

Catering for individual difference was one of the major concerns of the school and substantial resources, including a dedicated team of teachers and teaching assistants,

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were allocated to the task. One major strategy was to provide weekly extra lessons before normal classes begin for lower performing students. Students were selected based on formative assessment performance. English teachers made use of remedial worksheets provided by the textbook publishers that required students to, for example, circle a correct answer instead of spelling entire words, or fill in blanks left in sentences instead of writing whole sentences. Students found this simplified work easier to handle and that it helped them to prepare for later regular work. These lessons lasted for about 35 minutes a week, from 7:50 a.m. to 8:25 a.m. Not all parents consented to their children being given the extra lessons, mainly because the children had to wake up earlier. Younger children sometimes also found it difficult to concentrate for a period in excess of what was already expected of them in regular lessons. Another way was breaking down tasks into smaller steps, providing increased instant feedback, and using more activities to engage students. Students made significant progress: several of them were able to leave the extra classes after one or two semesters. Some students also enrolled in groups where teaching assistants helped them with homework after class. It seemed students that had fallen behind were able to catch up more easily using the extra classes. That student assessment results were used to identify students that might benefit from the classes illustrates the importance of using assessment data to inform teaching adjustments.

Another strategy the school adopted was adjusting student homework. Several homework assignments were open-ended, and allowed students to work in their own way. One example was the 'Word Bank', where students collected vocabulary related to a designated theme and provided an explanation. Students were not told what words to include. Some students chose to write a sentence to illustrate the meaning, some tried to define the items, some used drawings or Chinese translation, while some used a mixture of methods. Students therefore formed their own mental representation of the lexical items when they compiled their word banks. Students seemed to like this process of learning and enjoyed trying to illustrate their meaning by different means. Many of them liked to exchange their word banks with their peers to learn more words and to appreciate drawings.

Another kind of homework the school assigns was free writing. About once a week, students submitted one piece of writing. Students were not necessarily given a topic to write about and no word limit was enforced. In Primary 2, for example, stronger students often submitted extended paragraphs on topics ranging from strange dreams to their favorite cartoon characters. Less able students wrote sentences using the language structures taught in class. These pieces of writing displayed students' personalities, interests, and relative abilities to write when not given much support or guidance. Students who were significantly weaker or had special learning difficulties could be exempted from certain types of homework. These adjustments and exemptions were decided together with the support team, which also coordinated the students' Individual Educational Plans (IEPs) and educational psychologist and speech therapist services.

In Primary Literacy Programme (PLP-R) lessons for junior primary students, students sat in groups according to their reading level. Each group was assigned a teacher (either a Native English Teacher, a regular teacher or an assistant) that engaged the students in different ways depending on that groups' reading level. For example, for slower readers, the reading process included matching pictures with words, letter-sound relations, and sight words, whereas faster readers were encouraged to think what they would do if they were in similar situations as the characters, speculate on the likely development on the plot, or ask questions that probed their imaginations, creativity and critical thinking skills.

Efforts were taken to reduce any possible stigmatizing effects. The names of the groups were colors and students seemed unaware that the groups were based on reading levels. The teachers took turns with each of the groups and tried not to allow students to know about the activities in other groups.

This is an example of homogenous grouping being used to cater for students of different needs and this worked well. Students were also switched to different groups as they progressed—an example of using assessment to inform teaching.

Case 2: A secondary school

In a secondary school, students were given a survey to determine whether they were visual, kinesthetic, or auditory learners. For classes with more visual learners, animated reading texts and presentation slides with more visual elements were used. The animated texts aided students' understanding. In visually-enhanced presentation slides, students learned verbs illustrated with GIFs, which are digital pictures that move, and watched clips from YouTube. In this way, learning styles were used as a roadmap to guide the teacher in the choice of learning experience (The Center for Comprehensive School Reform and Improvement [CCSRI], n.d.).

As discussed earlier, varying the learning objectives for each student using teacherstudent contracts is a way of catering for differences. These strategies are goal-setting and students engaged in goal-setting activities regularly throughout the semester. Indeed, they began by setting goals for themselves under the guidance of their teachers and continued to review their progress before making a final evaluation of whether their goals are achieved at the end of the school year.

While this goal-setting activity was multi-disciplinary and not specific to English teaching, many students set goals around how well they wanted to perform while learning English. As in the process of setting teacher-student contracts, teachers were instructed to guide students through the goal-setting process by highlighting impractical goals or helping students find methods that might increase their chances of achieving goals.

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As discussed earlier, information technology is a way to cater for individual differences, especially with the use of computer programs which can track and analyze student progress (Pachler, Daly, Mor & Mellar, 2010). An online e-reading platform was used at the school to assess each student and place them in one of the 48 levels according to ability. Students were encouraged to read passages on the platform regularly and answer comprehension questions set by ability. The system tracked individual student performance and allowed the teachers to note progress before the school's formal tests and exams took place. This offered important and timely insights for teachers.

Information technology was also used in the form of Google Classroom to aid crosslevel learning. A wealth of English language learning resources had been uploaded to the school's Google Classroom, including grammar learning resources, songs through which to learn grammar, glossaries, support for writing various text types, interesting reading materials, useful expressions used in writing and speaking, general advice on study skills, links to different online learning resources, e-books, and vocabulary self-assessment packages. Form 1 students were able to access resources intended for Form 5 students and vice versa. Google Classroom seemed to be popular with learners who wanted to explore the resources of higher forms, and those who wanted to revisit materials that they had learned in lower forms. This seemed to help students to learn at their own pace.

Further opportunities were extended to faster and gifted learners. The school cohosted general knowledge quiz competitions with other schools. Form 3 to Form 5 students confident in speaking were given opportunities to become masters-of-ceremonies. Also, a lunchtime 'Writing Lab' offered learning opportunities for students to experiment with various writing techniques. Topics included writing attractive introductions, adjusting register, tone and style to context, as well as various persuasive techniques. Students appeared to learn more because the materials were designed and the topics chosen based on identified needs. The small of the group seemed to make it is easier for the teacher to assess individual needs and adapt the lab sessions accordingly.

Recommendations to teachers

For differentiation to be successful, teachers need to have good knowledge of individual students and deploy suitable instructional techniques and strategies. Differentiation almost inevitably entails less predictable classes. Teachers also need good supervision and communication skills because of the diversity of activities. This places more demand on teachers because, in differentiated classrooms, teachers need to be ready to introduce flexibility to lessons, fully utilize their skills and enlist help from educational psychologists or more experienced colleagues, especially when teaching gifted or students with Special Educaional Needs.

Recommendations to schools and Educational Bureau

Learner needs might be miscalculated and mis-catered for if teachers are not professionally trained. Teachers can be supported with professional development programs that teach them why and how to differentiate. Co-planning meetings may also be an important way for teachers to share best practices. A broad range of school materials and activities are needed and should be supported by increased human, monetary and time resources. More resources should be allocated so that learning programs can be put forward.

Some parents or students may not understand differentiation, especially when considering common notions of fairness. They need to be better informed and prepared. I have experienced queries from parents wondering why their child's work is easier or harder than that of other students. It is important for principals and teachers to be able to explain to parents that temporarily lowered expectations are designed to help their child make progress. Teachers can also help parents understand that extra work or more challenging work for higher-ability students is designed to help them learn more effectively and that students often feel more motivated and satisfied when appropriately challenged.

Conclusion

Does differentiation mean teaching 31 different curriculums to 31 different students? No. But differentiation strategies like using assessment, adapting content, varying process, using different ways to group students, and using technologies help more advanced students move ahead and less able students catch up. Qualitative differences like learning styles need to be catered for and this is done by offering options and ranges of activities tailored to specific needs. Differentiation, perhaps, calls for a fundamental shift in educational goals: from equalizing the students, to helping them unleash their individual potential. This carries implications for the entire education system. The planned elements of the curriculum need to be more flexible because true differentiation gives teachers more responsibility to adapt the curriculum. The "one-size-fits-all" approach to curriculum development and education is outdated.

Catering for individual difference requires fewer interpersonal comparisons be made and that the curriculum be more humanistic and attend to the special traits of each student. A change in mindset is needed: individual difference is not a burden but an opportunity to develop more constructivist, active, and interactive pedagogy. Schools should not only cope with and cater for diversity but bring and encourage difference. It should be a fundamental educational right that all students obtain education suitable for them and receive a reward for reaching their potentials. I believe differentiation and catering for individual difference opens exciting new opportunities both for teaching and learning.

References

- Barrow, R. (1984) *Giving Teaching back to Teachers. A critical introduction to curriculum theory*, Brighton: Wheatsheaf Books.
- Blenkin, G. M. et al (1992) Change and the Curriculum, London: Paul Chapman.
- Bobbitt, F. (1918) The Curriculum, Boston: Houghton Mifflin
- Bobbitt, F. (1928) How to Make a Curriculum, Boston: Houghton Mifflin
- Bremner, S. (1999). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. *Canadian Modern Language Review*, 55(4). 490-514.
- Brophy, J. E., & Good, T. L. (1974). Teacher-student relationships: Causes and consequences. Holt, Rinehart & Winston., Inc., 383 Madison Avenue, New York, New York.
- Carr, W. & Kemmis, S. (1986) *Becoming Critical. Education, knowledge and action research*, Lewes: Falmer Press
- Cheung, C. K. (2001). The use of popular culture as a stimulus to motivate secondary students' English learning in Hong Kong. *ELT journal* 55(1). 55-61.
- Chiu, M., & Ho, E.S.C. (2006). Family effects on student achievement in Hong Kong. *Asia Pacific Journal of Education 26*(1). 21-35.
- Chow, B.W.Y., McBride-Chang, C., & Burgess, S. (2005). Phonological Processing Skills and Early Reading Abilities in Hong Kong Chinese Kindergarteners Learning to Read English as a Second Language. *Journal of educational psychology*, *97*(1), 81.
- Cook, W. W. (1948). The psychological basis of the modern curriculum: 3. Individual differences and curriculum practice. *Journal of Educational Psychology*, *39*(3), 141.
- Curriculum Development Council. (2007) English Language Curriculum and Assessment Guide (Secondary 4-6).Hong Kong. Retrieved 7 November 2018 http://www.edb.gov. hk/attachment/en/curriculum-development/kla/eng-edu/eng_lang_final.pdf
- Curriculum Development Council. *Study on Strategies to Cope with Individual Differences in Academic Abilities of Primary School Pupils*. Retrieved 7 November 2018 http://cd1.edb.hkedcity.net/cd/id/index_en.html
- Dewey, J. (1902) The Child and the Curriculum, Chicago: University of Chicago Press.
- Dewey, J. (1938) Experience and Education, New York: Macmillan.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The modern language journal*, 78(3), 273-284.

- Esposito, D. (1973). Homogeneous and heterogeneous ability grouping: Principal findings and implications for evaluating and designing more effective educational environments. *Review of Educational Research* 43(2), 163-179.
- Field, J. (1998). Skills and strategies: towards a new methodology for listening English Language. *Teaching Journal 52*(2), 110-118.
- Fillmore, L. W. (1979). Individual differences in second language acquisition. In C. J. Fillmore, D. Kempler, W.S-Y. Wang (Eds.), *Individual Differences in Language Ability and Language Behavior*, 203-228.
- Gillies, R. & Ashman, A. (1996). Teaching collaborative skills to primary school children in classroom-based work groups. *Learning and Instruction* 6(3), 187-200.
- Good, M. E. (2006). Differentiated instruction: Principles and techniques for the elementary grades.
- Hallett, D., Nunes, T., Bryant, P., & Thorpe, C. M. (2012). Individual differences in conceptual and procedural fraction understanding: The role of abilities and school experience. *Journal of Experimental Child Psychology*, 113(4), 469-486.
- HKSAR Government (2017). International study shows Hong Kong students stand out in reading literacy. Retrieved on 7 November 2018 from https://www.info.gov.hk/gia/general/201712/06/P2017120500861.htm
- Hong Kong Academy for Gifted Education. Retrieved 10th May 2018 from, http://ge.hkage.org.hk/en/teacher-article
- Horwitz, E. K., Horwitz, M.B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern language journal 70*(2), 125-132.
- Huang, H. S., & Hanley, J. R. (1995). Phonological awareness and visual skills in learning to read Chinese and English. *Cognition* 54(1), 73-98.
- Huitt, W. (1996). Mastery learning. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved 10th May 2018 from http://www.edpsycinteractive.org/topics/instruct/mastery.html
- Huitt, W. (1997). Individual differences. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved 10th May 2018 from http://www.edpsycinteractive.org/topics/instruct/indiff.html
- Huitt, W., & Hummel, J. (1997). An introduction to operant (instrumental) conditioning. *Educational Psychology Interactive*.

- Khoii, R., & Sharififar, S. (2013). Memorization versus semantic mapping in L2 vocabulary acquisition. *English Language Teaching Journal* 67(2), 199-209.
- Lai, M. L. (2005). Language attitudes of the first postcolonial generation in Hong Kong secondary schools. *Language in Society*, 34(3), 363-388.
- Lam, P.H.C. & Wan, S.W.Y. (2010). Students' Voices: Enriching Learning Experiences through M-learning. Wireless, Mobile and Ubiquitous Technologies in Education (WMUTE)., 2010 6th IEEE International Conference on Lam, 171 -176
- Law, E.H.F., Wan, S.W.Y., Galton, M., & Lee, J.C.K.^a (2010). Managing school-based curriculum innovations: a Hong Kong case study. *Curriculum Journal 21*(3), 313-332
- Lightbown, P. M., Spada, N., Ranta, L., & Rand, J. (1999). *How languages are learned* (Vol. 2). Oxford: Oxford university press.
- Liu, N. F., & Littlewood, W. (1997). Why do many students appear reluctant to participate in classroom learning discourse? *System* 25(3), 371-384.
- Lou, Y., Abrami, P.C., Spence, J.C., Poulsen, C., Chambers, B., & d'Apollonia, S. (1996). Within-class grouping: A meta-analysis. *Review of Educational Research* 66(4), 423-458.
- Mercer, S. (2012). Dispelling the myth of the natural-born linguist. *English Language Teaching Journal 66*(1), 22-29.
- Molfese, D.L., & Molfese, V.J. (2002). *Developmental Variations in Learning: Applications to Social, Executive Function, Language, and Reading Skills*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Morris, P. (1996). *The Hong Kong School Curriculum: Development, Issues and Policies*. Hong Kong: Hong Kong University Press.
- Ornstein, A. C., & Hunkins, F. P. (1998). *Curriculum: Foundations, principles, and issues* (3rd ed.). Needham Heights, MA: Allyn & Bacon.
- Pawlak, M. (2012). New Perspectives on Individual Differences in Language Learning and Teaching. Springer.
- Pierson, H.D., Fu, G. S., & Lee, S.Y. (1980). An analysis of the relationship between language attitudes and English attainment of secondary students in Hong Kong. *Language Learning*, *30*(2), 289-305.
- Salomon & Globerson (1987). When Teams Do Not Function the Way They Ought To. Retrieved 7 November 2018 http://www.davidlewisphd.com/courses/8001/ EDD8001/1989-Salomon Globerson.pdf.

- Shawer, S. F. (2010). Classroom-level curriculum development: EFL teachers as curriculum-developers, curriculum-makers and curriculum-transmitters. *Teaching and teacher education*, 26(2), 173-184.
- Shehadeh, A. (1999). Gender differences and equal opportunities in the ESL classroom. *English Language Teaching Journal* 53(4) (1999) 53(4): 256-261 doi:10.1093/ elt/53.4.256
- Skinner, E. A., Zimmer-Gembeck, M. J., Connell, J. P., Eccles, J. S., & Wellborn, J. G. (1998). Individual differences and the development of perceived control. *Monographs* of the society for Research in Child Development, i-220-231.
- Slavin, R. (1995). *Cooperative Learning: Theory, Research, and Practice*. Second edition. Boston: Allyn & Bacon.
- Swan, K. (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous online courses, *Distance Education*, 22(:2), 306-331.
- Taba, H. (1962) *Curriculum Development: Theory and practice*, New York: Harcourt Brace and World.
- Tanner, D., and & Tanner L. (1980). *Curriculum Development: Theory into Practice*. Upper Saddle River, New Jersey: Prentice Hall.
- The Center for Comprehensive School Reform and Improvement. A Teacher's Guide to Differentiating Instruction. Retrieved 7 November 2018 http://www.education.com/ reference/article/Ref_Teacher_s_Guide/
- Tomlinson, C.A. (1995). *Gifted Education Digests*. Retrieved 7 November 2018 http:// www.gifted.uconn.edu/siegle/tag/Digests/e536.html
- Tse, S. K., Loh, K. Y. E., Lam, Y. H. R., & Lam, W. I. J. (2010). A comparison of English and Chinese reading proficiency of primary school Chinese students. *Journal of Multilingual and Multicultural Development*, 31(2), 181-199.
- Tyler, R. W. (1949) *Basic Principles of Curriculum and Instruction*, Chicago: University of Chicago Press.
- Van Dyke, J.A. (2011). Effects of individual differences in verbal skills on eye-movement patterns during sentence reading. *Journal of Memory and Language Vol.* 65(1). 42-73

Wiggins, G. P., Wiggins, G., & McTighe, J. (2005). Understanding by design. Ascd.

Whitmore, J. R. (1980). Giftedness, conflict, and underachievement. Allyn & Bacon.

擁抱個別差異——課堂策略和課程調適概觀 以香港英語 課程為例

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摘要

本文首先從認知、社會學和心理方面討論個別差異,將個別差異和差異化視為動態 和多方面的概念。然後,本文以香港英語課程為例,討論各種照顧個別差異的課堂 策略和課程調適,例如善用評估、調整學習目標、調適教學內容、調整教學過程和 使用分組。本文參考了當前的教育研究、課程文件及作者的教學經驗,對每項策略 和課程調適的潛在利益或問題都進行了討論,並向不同持分者提出建議。

關鍵詞

個別差異、課堂策略、課程調適