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THE IMPACTS AND CAUSES OF THE DUNNING-KRUGER EFFECT ON STUDENTS, TEACHERS, AND ADMINISTRATIONS IN ENGLISH LANGUAGE TEACHING ENVIRONMENTS

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ABSTRACT

The Dunning-Kruger Effect (DKE) is a cognitive bias where individuals with limited ability or knowledge tend to overestimate their own competencies, while those who are more skilled often underestimate their capabilities. Identified in a seminal 1999 study by psychologists David Dunning and Justin Kruger, this phenomenon underscores essential concepts in metacognition – the awareness and understanding of one's thought processes. The DKE manifests across various domains, particularly in educational contexts, leading to significant implications for students, teachers, and administrators within English Language Teaching (ELT). This paper explores the origins and key findings surrounding the DKE, illustrating its detrimental impact on self-assessment and feedback mechanisms. It addresses students' overconfidence or self-doubt in language proficiency, the challenges teachers face in evaluating their instructional effectiveness, and the potential pitfalls administrators encounter in decision-making and policy implementation. Additionally, the paper discusses the interplay of related biases, such as optimism bias and cognitive dissonance, which further complicate accurate self-evaluation. To combat these challenges, it advocates for enhanced metacognitive training, constructive feedback strategies, and a growth mindset for all stakeholders involved. Ultimately, fostering self-awareness and a reflective practice in ELT settings can lead to improved learning outcomes and a more productive educational environment.

Keywords: Dunning-Kruger effect (DKE), cognitive bias, metacognition, educational psychology, self-perception, self-efficacy English language teaching (ELT).

1. INTRODUCTION

1.1 Theoretical Background

The DKE is a cognitive bias where individuals with low ability, knowledge, or competence in a particular domain overestimate their own capabilities. Conversely, individuals with higher competence tend to underestimate their relative ability (Dunning & Krueger, 1999). This phenomenon was first formally identified and described in a 1999 study by psychologists David Dunning and Justin Kruger at Cornell University. They drew on earlier theories of psychology, particularly those related to metacognition—the awareness and understanding of one's own thought processes. These theories provided a foundation for their insights into how people assess their own competence and knowledge (Dunning et al., 2003). The first of these was illusory superiority, which is a cognitive bias wherein people overestimate their own abilities relative to others (Alicke & Govorun, 2005). This idea, which has roots in the work of American psychologists like Norman Triplett (who is best known for conducting one of the earliest experiments in social psychology on the phenomenon of social facilitation) and Leon Festinger

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Vol. 7, No. 04; 2024

(who originated the theory of cognitive dissonance and social comparison theory, suggesting that people often rate themselves as better than average in various domains, even when this is statistically unlikely (Sedikides & Gregg, 2008). Secondly is something called significance. It's something Dunning and Kruger extended on by demonstrating that people who are incompetent in a particular domain are not only more likely to overestimate their abilities but are also less capable of recognizing their own incompetence (Pennycook et al., 2017). Thirdly were the metacognitive theories. Metacognition refers to the ability to reflect on and control one's own cognitive processes. John Flavell (1979), a prominent figure in this area (who specializes in children's cognitive development), cultivated the idea of metacognitive knowledge, which includes knowledge about oneself as a learner, strategies for learning, and the tasks at hand, and also emphasized the role of metacognitive experiences in monitoring and regulating cognitive tasks (Schraw & Dennison, 1994). Self-assessment and collaboration are other important theories suggesting that individuals often struggle to accurately evaluate their own performance or knowledge (Boud & Falchikov, 1989). This work, often associated with researchers like David A. Kolb (an American educational theorist whose interests and publications focused on experiential learning, the individual and social change, career development, and executive and professional education), has shown that people tend to have biased self-perceptions, particularly in situations where they lack objective feedback (Kold, 1984; Kolb & Fry, 1975). Additionally, cognitive biases and heuristics that were deeply analyzed by Daniel Kahneman (an Israeli-American psychologist best-known for his work on the psychology of judgment and decision-making as well as behavioral economics) and Amos Tversky (an Israeli cognitive and mathematical psychologist and an important figure in the discovery of systematic human cognitive bias and handling of risk), describe systematic errors in thinking that affect decisions and judgments (Kahneman, 2001; Kahneman & Tversky, 1979; Tversky & Kahneman, 1974).

The theories mentioned above are crucial for understanding the DKE. The miscalibration has significant implications in various domains, including education, workplace performance, and social behavior (Burson et al, 2006). Today, the DKE is often referenced in discussions about public perception of expertise, particularly in the context of social media, where individuals with limited knowledge can sometimes influence public opinion despite lacking expertise (Huang, 2017; Vannucci, 2017; Lin, 2016). The effect also underscores the importance of metacognitive training and the development of self-awareness to help individuals better assess their abilities and limitations (Schraw & Moshman, 1995).

2. ORIGINS AND KEY FINDINGS

Dunning and Kruger's interest in the effect was partly inspired by a 1995 case in Pittsburgh where a man, McArthur Wheeler, robbed two banks in broad daylight without any disguise, believing that rubbing lemon juice on his face would make him invisible to security cameras. Wheeler's confidence in his bizarre belief, despite its absurdity, prompted Dunning and Kruger to explore why some people with limited knowledge or skills exhibit an inflated sense of confidence (Dunning, 2011).

In their initial study, Dunning and Kruger tested participants across tasks like logical reasoning, grammar, and humor, and found that those in the lowest quartile significantly overestimated their performance. The researchers concluded that people lacking in knowledge or skills suffer from a

ISSN: 2582-0745
Vol. 7, No. 04; 2024

"double burden": not only do they reach incorrect conclusions and make poor choices, but their incompetence also robs them of the ability to recognize it (Schlosser et al, 2017). In other words, the DKE can be broken down into two key points: (1) incompetent individuals overestimate their ability – meaning, people with lower skill levels lack the necessary awareness and insight to accurately judge their abilities, leading them to believe they are much more competent than they truly are, and (2) those who are competent underestimate their ability; they're more aware of the complexity of the tasks and assume others possess the same level of knowledge, leading them to underappreciate their own competence (Fischer & Keusch, 2021). This mismatch between perceived and actual ability is primarily due to deficits in metacognitive abilities—the ability to assess one's own knowledge, skills, and limitations (Ehrlinger, 2016).

3. EVOLUTION AND CURRENT UNDERSTANDING

Since its introduction, the DKE has become a widely referenced concept, extending beyond psychology into various fields such as education, management, and popular culture. Over time, the model has been refined, with some research suggesting that while the effect is real, its strength can vary depending on task specificity, the nature of self-assessment, and cultural factors (Hall, 2011). Additionally, the model also highlights that improvement in self-awareness tends to occur only when individuals increase their competence, suggesting that education and targeted feedback can mitigate the DKE, although this requires a conscious effort to develop metacognitive skills (Hedge, 2000; Noori, 2016).

The DKE is particularly relevant in educational settings, including English language teaching classrooms, where students often need to evaluate their language skills, comprehension, and critical thinking abilities (Lightbown & Spada, 2014). These day's it's easy to see students who have an overconfidence in writing and grammar and believe that their essays are clear and well-organized when, in reality, they are riddled with grammatical errors, poor structure, and unclear arguments (Harmer, 2007). Unfortunately, this overconfidence can lead to resistance against constructive feedback or a lack of effort to improve (Ehrlinger et al., 2008). By contrast, teachers can often see an underestimation by high-performing students – that is, those who underestimate the quality of their work because they are aware of nuances and complexities in writing and critical analysis that others might miss (Ehrlinger & Dunning, 2003). Self-assessment and peer feedback is also a problem as DKE can skew these. To illustrate, sudents with lower competence might give themselves or others overly positive assessments, while more proficient students might be harsh in evaluating their own or others' work, believing they have performed worse than they actually did (Boud, 1995). In addition, growth mindset and metacognitive training is problematic as teachers who are aware of the DKE often incorporate metacognitive strategies in the classroom without fully understanding them and the consequence that could result (Cacioppo et al, 1996). If done the right way, teaching students how to accurately self-assess, encouraging reflection on their learning processes, and providing detailed feedback can help students develop a more realistic understanding of their strengths and weaknesses (Cohen, 2011). Finally, there is often a misalignment between perception and reality in reading comprehension. For example, a student might believe they have fully grasped a text because they understand its surface meaning, but they may overlook deeper interpretations, nuances, or critical viewpoints (Dornyei, 2001), which necessitates teachers designing activities that challenge students to move beyond basic comprehension to critical analysis and synthesis (Brown, 2004; Ellis, 2008).

ISSN: 2582-0745
Vol. 7, No. 04; 2024

4. PROGRESSION AND CONTEMPORARY RELEVANCE

The DKE continues to be an important consideration in educational theory and practice. The growing emphasis on metacognitive awareness—students' ability to reflect on their own learning processes—directly relates to counteracting the Dunning-Kruger effect. With an increasing focus on 21st-century skills such as critical thinking and self-directed learning, recognizing and addressing cognitive biases has become crucial in fostering effective learning environments.

Moreover, the use of formative assessments, scaffolded feedback, and iterative learning models are all modern strategies that aim to address discrepancies between perceived and actual ability, aligning closely with the insights derived from Dunning and Kruger's research. By emphasizing growth over static ability and encouraging students to critically evaluate their own understanding, English classrooms today continue to be shaped by principles that counteract the DKE.

In conclusion, the Dunning-Kruger effect underscores the importance of self-awareness in learning (Hu & He, 2019). In English education, where subjective evaluation is a common challenge, this cognitive bias is highly relevant. By fostering better metacognitive skills and encouraging realistic self-assessment, educators can help students develop a more accurate understanding of their abilities, ultimately leading to more effective learning and growth.

5. IMPACTS OF THE DKE ON ENGLISH LANGUAGE STUDENTS

The DKE significantly impacts students in ELT environments by influencing their self-perception, learning strategies, and overall academic performance (Evans & Stanovich, 2013). This cognitive bias can affect students at all proficiency levels, leading to overconfidence in some cases and self-doubt in others. In addition to writing and grammar issues, warped feedback (e.g. overly positive comments because they simply don't understand and, on the flip side, being excessively critical of their peers and providing feedback that's harsher than warranted), self- assessment that is often misguided and useless as students with limited English proficiency might give themselves high marks, falsely believing they've mastered the material, and this inaccurate self-assessment can lead to poor performance on exams or in real-world communication situations (Critcher & Dunning, 2009). Again, for those on the other side of the spectrum (i.e. those with advanced English skills) might be overly critical of their work, focusing on minor flaws and perceiving them as significant issues, with this illusory perfectionism leading to anxiety and reluctance to participate in class discussions or submit assignments until they feel their work is absolutely flawless (Bonner & Newell, 2010). The further this gets, high-performing students might avoid challenging tasks because they underestimate their capabilitie, like a student who is actually skilled in reading comprehension who might shy away from analyzing complex literary texts because they doubt their ability to interpret them accurately. On top of all this, there might be impaired metacognitive development as students' ability to evaluate their own knowledge and learning, which can lead to students adopting ineffective study habits (Flowerdew & Miller, 2005). They might not also engage in any type of self-reflection practices, such as evaluating their own progress or considering how they can improve, resulting in stagnation, where students do not advance because they are unaware of their learning gaps (Cook, 2001). One thing sometimes overlooked in in the context of DKE is something that happens every day in classes round the globe: cooperative and collaborative learning via pair, group and whole class work. In other words, the DKR can create disruptive group dynamics (Scrivener, 2011). Not unusually, overconfident students may dominate group discussions, believing they are the most knowledgeable, which can

ISSN: 2582-0745
Vol. 7, No. 04; 2024

suppress contributions from others and lead to an imbalance where the group's output is not representative of everyone's true abilities. Moreover, when students with lower proficiency levels take charge of group tasks, the overall quality of the work might suffer, leading to suboptimal learning experiences for all group members (Swain & Lapkin, 1995; Spolsky 1989).

Motivation is another area of concern. This can come in the form of demotivation from unrealistic self-perceptions and an imbalanced effort. When students consistently overestimate their abilities, they might become demotivated when faced with challenges that expose their true skill levels, and students who think they are already proficient might put less effort into their studies, missing opportunities for growth (while underconfident students may expend excessive effort on minor details, leading to burnout and reduced enjoyment of the learning process (McCabe & Meller, 2020; Lake & Lin, 2016). All of this could easily lease to strained teacher-student relationships (Richards & Renandya, 2002). Teachers may find it challenging to guide overconfident students who resist feedback or dismiss advice, which can strain the teacher-student relationship, making it harder to support the student's growth. Furthermore**,** students who believe they are more competent than they are may resist instructional techniques, perceiving them as unnecessary (McMillian & Hearn, 2008). These frictions can cause a great deal of undue stress.

Luckily, there some effective ways to mitigate the effects of the DKE in ELT environments. Teachers could foster metacognitive awareness by explicitly teaching strategies such as self-assessment techniques, goal setting, and reflection exercises, as well as encouraging students to regularly reflect on their progress can help them develop a more accurate understanding of their abilities (**Gogoi, & Mukherjee, 2020)**. They could also provide more detailed, structured, and constructive feedback as that can help students align their self-perceptions with reality, and for overconfident students, this might involve showing specific examples of errors, while underconfident students may benefit from positive reinforcement that highlights their strengths (Miller & Geraci, 2011).Teachers might also consider using data-driven assessments, especially when students see data that contradicts their self-assessment, they may be more open to adjusting their perceptions (Carter & Dunning, 2008). Finally, though hard, teachers can try encouraging a growth mindset where students view their abilities as improvable through effort. This can help counter the fixed, inaccurate beliefs associated with the DKE (Zell & Krizan, 2014). In short, and ideally, when students focus on growth rather than fixed ability, they are more likely to engage in productive learning behaviors.

6. CAUSES OF THE DKE FOR ENGLISH LANGUAGE STUDENTS

As we've seen, the DKE in ELT environments can significantly impact students' learning, progress, and motivation. This cognitive bias, where individuals with low ability overestimate their skills, or conversely, more capable students underestimate their competence, can manifest in various ways in the classroom. As noted previously, one of the core causes of the Dunning-Kruger effect is a lack of metacognitive awareness—students' ability to accurately evaluate their own skills and knowledge. In English language learning, metacognitive skills are crucial because students need to recognize their strengths and weaknesses in language skills (reading, writing, listening, speaking), as well as monitor their progress and adjust their learning strategies accordingly (Celce-Murcia et al., 2014; Brown, 2002; Nunnan, 1999). Not doing so may cause

ISSN: 2582-0745
Vol. 7, No. 04; 2024

some students to misjudge their proficiency levels, leading to overconfidence in their abilities or unnecessary self-doubt.

Secondly, students may have an incomplete understanding of language complexity, especially in terms language skill nuances (i.e. perceived language mastery versus understanding of surface-level aspects only – not the deeper complexities of syntax, idiomatic expressions, or academic language required for advanced proficiency) and cultural complexities (which are often major hindrances to meaningful comprehension) (Brown, 2007). Put simply, overestimation can quickly lead to frustrating stagnation (De Neys & Franssens, 2009).

Inaccurate feedback and grading are also vexing issues. Feedback plays a critical role in shaping students' self-perception. When teachers provide overly positive feedback without specific guidance (e.g. a detailed rubric), students may develop an inflated sense of their language abilities. Conversely, inconsistent or vague grading can lead to misunderstandings about their actual skill level is (Johnson, 2009; Graves, 2000).

Another issue is cultural factors and expectations. In some cultures, students are taught to either be highly confident in their abilities or to downplay their skills out of modesty (Chung & Robbins, 2015). Students who are encouraged to be overly confident may disregard constructive criticism, assuming they are already proficient, while students from cultures that discourage self-promotion may underestimate their skills, leading to unnecessary self-doubt and hesitation in using the language (Parl & Santos, 2017; Kwan et al., 1997).

Peer comparisons and social influences cannot be neglected as students often compare themselves to their peers when evaluating their abilities, especially when they see themselves performing better or worse than others, which can lead to an inflated sense of competence or feelings of depression and dejection (Chambers & Windschitl, 2004; Blanton & Pelham, 2001).

It has been noted that overconfidence can lead to stagnation, but underconfidence can be just as deleterious. Students who underestimate their abilities may avoid speaking or participating in class because they fear making mistakes, even if they are more capable than they believe, and could experience anxiety or low motivation, which can lead to disengagement from learning activities and slow their progress (Moore & Healy, 2008; Schaefer et al., 2004). This can create a self-fulfilling prophecy where their lack of participation and practice limits their growth, reinforcing their belief that they are not skilled (Dunning et al., 2004; Justin et al., 2000).

Setting learning goals can be tricky as students who do not accurately gauge their abilities struggle to set appropriate ones (Brown, 2001). Overconfident students might set goals that are too easy, leading to boredom and disengagement. Underconfident students may set goals that are too low, limiting their progress, or goals that are overly ambitious, leading to frustration and burnout (Cacioppo et al., 1996).

Despite all of these troublesome causes, there are some ways to overcome DKE in ELT. One way is self-assessment checklists, which they can use to evaluate their performance in specific language skills (e.g., pronunciation, essay structure) helps them develop a more accurate understanding of

ISSN: 2582-0745
Vol. 7, No. 04; 2024

their abilities (Larsen-Freeman & Anderson, 2011). Guided self-reflections are also helpful as they encourage students to regularly reflect on what they've learned, where they struggled, and what they need to improve fosters self-awareness and realistic self-assessment (Farrell, 2013). Balanced feedback is also vital. While it's nice to get a pat on the back, teachers need to highlight both strengths and areas for improvement (e.g. "You did this well, but you're still struggling with…"). But, this kind of feedback is not enough. Students need clear next steps and where to direct their energies. One thing that might be common to most teachers is the power of data analytics (Liu & Zhang; 2018; Reindeers, 2018). Diagnostic assessments, or periodic evaluations that clearly indicate where students are in their language development, can serve as a reality check and guide further learning (Papp et al, 2017). Progress tracking tools are powerful too. In other words, digital tools that track progress in areas like vocabulary acquisition, grammar usage, or speaking fluency can give students an objective measure of their growth, reducing reliance on subjective self-assessment (Alharbi, 2020; Li & Cummins, 2019; Shintani & Aubrey, 2016). While incredibly hard to put into practice, students must see mistakes as learning opportunities rather than failures (Allright & Hanks, 2009; Edge, 1989; C**order, 1967).** The significance of learner's errors. *International Review of Applied Linguistics in Language Teaching*, *5*(1-4), 161-170.. If students need any encouragement, just think of NBA legend Michael Jordan, who once famously said, "I've missed more than 9,000 shots in my career. I've almost lost 300 games. 26 times I've been trusted to take the game-winning shot and missed, I've failed over and over again in my life. And that is why I succeed." Finally, exposing students to a range of language tasks at different levels of difficulty helps them better understand their strengths and weaknesses. Teachers can do this by revisiting core skills at increasing levels of complexity allows students to build a more nuanced understanding of language structures and concepts (Ellis, 2008; Krashen, 1995; Vygotsky, 1978). In addition, digital platforms or classroom exercises that adapt to a student's performance level can ensure that they are consistently challenged at the right level, helping them maintain an accurate sense of their progress (Kessler, 2018). In short, the DKE can significantly influence how students perceive their abilities in English language learning, leading to overconfidence or underconfidence, both of which hinder progress. By fostering metacognitive skills, providing specific feedback, promoting a growth mindset, and offering varied and reflective learning opportunities, teachers can help students develop a more accurate understanding of their language abilities. This, in turn, can lead to more effective learning strategies, greater participation, and improved outcomes in English language classrooms.

7. IMPACTS OF THE DKE ON ENGLISH LANGUAGE TEACHERS

The DKE can have significant implications for teachers in ELT environments too. This cognitive bias can influence teachers' self-perception, instructional strategies, and interactions with students, ultimately impacting the effectiveness of their teaching (Mousavi & Amin, 2017).

First of all, it can lead to an overconfidence in teaching abilities, which can lead to ineffective instructional methods (i.e. they might rely on outdated or ineffective teaching strategies, believing these methods are highly effective despite evidence to the contrary), limited professional development (as they believe they already possess the necessary skills and knowledge to succeed in their classroom, school, and our field, but this lack of engagement in continuous learning can lead to stagnation and reduced teaching quality over time, and dismissal of or resistance to feedback from colleagues, supervisors, administrators, and even students (which can prevent them

ISSN: 2582-0745
Vol. 7, No. 04; 2024

from recognizing areas where they need improvement, thereby limiting their growth in specific areas or overall (**Atai & Nejadghanbar, 2016)**.

Conversely, more competent teachers may underestimate their abilities, which leads to a great deal of self-doubt and burnout (with teachers constantly second-guessing their teaching decisions, and feeling overwhelmed by the demands of the classroom, even when they are performing well), avoiding leadership roles (e.g. becoming department heads, mentoring less experienced teachers, or leading professional development workshops), and overpreparation and exhaustion (as they believe that their approaches are wrong or off, their materials are inadequate or that they need to put in extra effort to compensate for perceived shortcomings) (**Rahimi & Asadollahi, 2012)**.

Another serious issue are the challenges in student assessment and feedback. In other words, the DKE can distort teachers' ability to accurately assess students and provide appropriate feedback, which can happen through inaccurate grading (e.g. overconfident teachers might inaccurately assess student work, either inflating or deflating grades based on their own misjudgment of what constitutes quality work, leading to grade inflation or deflation, where students receive marks that do not accurately reflect their abilities), inconsistent feedback with teachers overestimating their competence giving vague or overly general feedback, believing that their comments are clear and helpful when, in reality, students may not fully understand how to improve (with the opposite being teachers who underestimate their abilities might be overly critical or hesitant to provide clear direction, fearing that they might be wrong or too harsh), and misalignment with learning outcomes (i.e. teachers who are not fully aware of their own strengths and weaknesses might struggle to align their assessments and feedback with intended learning outcomes) (Park & Lee, 2020; **Ghonsooly & Hassanzadeh, 2019; Barnard & Burns, 2012; Butler, 2012).**

The impact on classroom dynamics and student relationships is equally problematic. This can lead to authoritarian classroom management with overconfident teachers adopting an overly imposing teaching style, believing that their methods and expectations are beyond question, which can create a rigid classroom environment where students feel less comfortable asking questions, expressing opinions, or taking creative risks (Mercer, 2016). Favoritism and bias can also come into play. Teachers affected by the DKE might unconsciously favor certain students or teaching practices that align with their perceived strengths to the detriment of the majority of students in the class (Mottet et al., 2006). There could also be negative perceptions, especially as students are often observant of a teacher's confidence (or lack thereof) – meaning, overconfident teachers may come across as arrogant or dismissive, leading to disengagement or resentment among students, and underconfident teachers may struggle to command respect, leading to challenges in classroom management and a lack of student motivation (**Tschannen-Moran& Hoy, 2007)**.

It's hard to ignore the fact that the DKE can have on professional collaboration and collegial relationships (i.e. how teachers engage with their colleagues). There could be resistance to collaborative practices like co-teaching, peer observations, or team planning, especially from overconfident teachers (De Lima, 2001). Moreover, teachers who overestimate their abilities might come across as dismissive or condescending to colleagues, leading to strained relationships, which may come in the form of dominating meetings, forcing their ideas, or being less open to any type of constructive dialogue (Goodwin & Ross, 2020). Mentorship can provide valuable opportunities

ISSN: 2582-0745
Vol. 7, No. 04; 2024

to learn and grow, but underconfident teachers may avoid participating in these types of programs (either as mentors or mentees) as they may feel unqualified to guide others or fear exposing their perceived weaknesses, leading to missed opportunities for professional growth (Van Loon et al., 2019).

Teachers' self-perception can influence how they approach curriculum design, lesson planning, and implementation (Bailey, 2005). The stumbling block comes in the form of overemphasis on certain areas, like the ones they believe they excel in, such as literature analysis or creative writing, while neglecting other crucial aspects of language learning like vocabulary building, grammar, or speaking skills. This can lead to an imbalanced curriculum that does not fully address students' needs (Brown, 1995). In addition to this, there can be inflexibility in instructional approaches as teachers who overestimate their expertise might be resistant to adopting new pedagogical methods or integrating innovative teaching tools, like technology-enhanced learning and AI developments and stick rigidly to traditional methods, believing these are superior without considering evolving best practices (Holmes et al., 2019; Nunan 1990), 1991). Finally, there's the overcomplication or oversimplification conundrum. This simply means that teachers who misjudge their own competence might design lessons that are either too complex or too simplistic – that is, overconfident teachers may assume that students can handle advanced content without adequate scaffolding, while underconfident teachers might simplify material to the point of limiting student challenge and growth (Richards & Farrell, 2005).

To mitigate the impact of the DKE in ELT environments, schools and educators can adopt several helpful strategies, to include ongoing reflective practice (Farrell, 2015), regular self-evaluation, peer observations, and thoughtful student feedback (Hattie & Timperley, 2007), all of which can greatly increase self-awareness and provide valuable insights into areas for improvement. Continuous professional development opportunities, tailored to different skill levels, can also help teachers stay updated with best practices. This can encourage a growth mindset and emphasizing the importance of lifelong learning can motivate teachers to seek out new knowledge and refine their skills (Gusky, 2002). Additionally, co-teaching and team planning can expose teachers to different perspectives and methods, helping them identify blind spots in their own practice (Mann & Walsh, 2017). Finally, using data from student assessments, peer reviews, and classroom observations can provide objective measures of teaching effectiveness, as well as help teachers calibrate their self-assessment more accurately and make informed decisions about their instructional approaches (Lai & Wang, 2020; Reindeers & White, 2016).

8. CAUSES OF THE DKE FOR ENGLISH LANGUAGE TEACHERS

The DKE in ELT environments can significantly affect teachers, leading to overconfidence or underconfidence in their teaching abilities. When teachers overestimate their knowledge or skills, they may make decisions that negatively impact students' learning. Conversely, teachers who underestimate their competence may lack insufficient knowledge of the subject matter they are teaching (e.g. they have inadequate knowledge and lack familiarity with key language teaching content and approaches), which can result in trying to teach concepts incorrectly and/or oversimplify topics and, consequently, leading students to acquire misconceptions or incomplete

ISSN: 2582-0745
Vol. 7, No. 04; 2024

knowledge (Simon, 2013). Moreover, the ability to teach effectively requires not only knowledge of the subject but also strong pedagogical skills. Some teachers might have a narrow understanding of a singular approach or method that they know well and feel confident with (e.g. Grammar Translation Method), and assume this one method is universally effective. Additionally, teachers who are new to the profession may not yet have developed the reflective practices needed to assess their teaching accurately, which may result in making initial success or positive student feedback as evidence that they have mastered teaching when, in reality, they still have significant room for growth (Grossman & McDonald, 2018). This leads into the positive feedback bias (i.e. where teachers overestimate their abilities if students provide positive feedback that is more a reflection of the teacher's likability than their teaching effectiveness) (Sanchez & Dunning, 2018). On top of that, there may be overreliance on exam results where teachers might assume that high student exam scores indicate effective teaching, when in reality, the scores could be more reflective of students' test-taking skills rather than deep language understanding (Blanch, 2017). As noted earlier, another cause of the DKE in teachers is resistance to continued professional growth. Some teachers may believe they have already mastered their subject and teaching methods, leading to complacency, and therefor may resist attending professional development workshops or integrating new techniques, thinking they have nothing left to learn. Similarly, teachers may fear exposure (i.e. they may avoid professional development because they fear exposing gaps in their knowledge and/or skills) (Kleefeld & Farnese, 2017). Teachers who work in environments with limited collaboration or peer interaction are more prone to the DKE. Without peer observations or feedback from colleagues, teachers might not have a clear sense of how effective their teaching truly is, and thus may assume their methods are the most effective simply because they have not seen alternatives in practice (Tappin & McKay, 2019; Johnson & Stapel, 2010).

When teachers overestimate their teaching abilities, they might not realize that their methods are not as effective as they believe (Foster et al., 2017). In fact, overconfident teachers might rely on repetitive drills or lecture-based approaches, believing these are sufficient. Students may disengage or struggle to retain information, leading to poor language acquisition. Moreover, teachers who overestimate their understanding of English grammar, pronunciation, or cultural nuances may pass on incorrect information or provide misleading feedback, and this can result in students developing language skills based on flawed foundations (Wheeler & Waite, 2020). Teachers who believe they are already effective might also resist integrating digital tools, collaborative learning techniques, or differentiated instruction, which can result in classrooms that fail to engage diverse learners or address contemporary challenges in language teaching (Kahneman & Klein, 2009). In addition, teachers who overestimate their abilities may not align their lessons with the school's curriculum objectives, resulting in gaps in students' language learning, which become especially problematic when students take standardized assessments that the teacher has not adequately prepared them for (Capraro & Thompson, 2008). Finally, teachers who overestimate their effectiveness might assume that students' difficulties are due to a lack of effort rather than gaps in their teaching, which can lead to frustration and a lack of empathy for students who need additional support (Paulus, 2015).

Fortunately, there are strategies to help overcome the DKE in ELT teachers. These include encouraging teachers to regularly reflect on their lessons, identify areas of difficulty, and note student responses can help them gain insights into their teaching effectiveness (Kilmova, 2015).

ISSN: 2582-0745
Vol. 7, No. 04; 2024

In conjunction with this, recording lessons and reviewing them with a critical eye or with a mentor can help teachers see areas they may have overlooked, such as how well students are engaged or whether they are providing clear instructions (Tsui, 2004). Another option is to set up observation exchanges where teachers observe each other's classes and possibly gain new ideas and better understand their own teaching practices by seeing how others approach similar challenges. Furthermore, providing opportunities for teachers to give and receive constructive feedback after observations helps them develop a more realistic understanding of their skills, and this feedback should be specific, actionable, and focus on both strengths and areas for improvement (Bailey, 2006). Another possibility is offering workshops that address specific areas of need, such as modern language teaching techniques, assessment strategies, or integrating new AI technology in language classrooms, with help teachers build confidence and reduce overestimation of their competence (Burns & Richards, 2009). Analyzing student performance data over time can reveal patterns that might not be immediately apparent, such as which areas students consistently struggle with. In other words, again, data analytics can help teachers pinpoint where their teaching may need adjustments (Sokolik & Dubravac, 2019). Establishing professional learning communitieswhere teachers regularly meet to discuss challenges, share strategies, and review new research can create a supportive environment that fosters continuous improvement. On a larger scale, which helps with avoid complacency and encourage lifelong learning, schools can encourage teachers to pursue additional certifications or degrees, attend conferences, and/or engage in research (Freeman & Johnson, 1988).

9. IMPACTS OF THE DKE FOR ELT ADMINISTRATIONS

The DKE can have substantial effects on ELT administrations, impacting decision-making, leadership, policy implementation, and overall institutional effectiveness. When administrators overestimate their competence, they may make poor decisions, resist necessary changes, or mismanage resources. Conversely, underconfident administrators may shy away from important initiatives or fail to assert the needed authority.

Firstly, administrators who overestimate their abilities may implement flawed policies or make decisions that negatively impact the teaching environment – meaning, administrators who are overconfident in their expertise may stick rigidly to outdated policies, believing that these approaches are superior despite evidence that newer methods are more effective (Hoy & Smith, 2007). Moreover, overconfident administrators might resist adopting new technologies, teaching strategies, or assessment methods, believing that their current systems are already optimal, resulting in stagnation, where the institution fails to keep up with advancements in language teaching, such as blended learning models or digital language labs (Kleinsasser, 2013). Additionally, overconfident leaders may impose decisions without consulting teachers, students, or other stakeholders, leading to policies that are misaligned with actual classroom needs. This can create a disconnect between administration and teaching staff, resulting in low morale and ineffective practices (Kennedy, 2016).

Administrators who underestimate their abilities can also create challenges in ELT environments. In other words, underconfident leaders may hesitate to implement significant changes, even when such changes are necessary to improve teaching and learning outcomes, to include delaying updating curricula or revising assessment models, fearing that they lack the expertise to drive the

ISSN: 2582-0745
Vol. 7, No. 04; 2024

changes effectively (Leithwood & Jantzi, 2008). When administrators doubt their own competence, they may struggle to assert authority or make decisive decisions, which can lead to a lack of clear direction, where conflicting priorities and uncertainty. Administrators who lack confidence in their own knowledge may also overly depend on outside consultants or experts, sometimes leading to decisions that do not fully align with the institution's context. While expert advice can be beneficial, overreliance may result in one-size-fits-all solutions that ignore the specific needs of the teaching environment (Robinson et al., 2008).

Simply put, the DKE can lead to poor allocation of resources in ELT administrations**.** For example, overconfident administrators might allocate resources based on their perceived strengths or interests rather than actual institutional needs. For instance, they might invest heavily in one area (like technology) while neglecting more urgent needs (like professional development for teachers), which can lead to wasted resources and missed opportunities for improvement (Murray, 2010). Also, if administrators overestimate their ability to evaluate teaching staff, they might make poor hiring or promotion decisions, selecting candidates who are not the best fit for their roles. On the other side, underconfident leaders may fail to recognize the talents within their team, leading to underutilization of skilled teachers and demotivation among staff. To boot, the DKE can lead to professional development programs that either overlook critical areas (due to overconfidence) or offer superficial, low-impact training (due to underconfidence), and this can result in teachers receiving training that does not address their actual needs or gaps in knowledge, limiting the overall effectiveness of the teaching staff (Fullan, 2011).

The relationship between administrators and teaching staff can be strained by the DKE. For instance, overconfident administrators might assume that their communication is clear and effective when, in reality, it is not. They may issue directives without sufficient explanation or fail to consider teachers' perspectives, leading to confusion and frustration. On the other hand, underconfident leaders might be hesitant to communicate important changes or provide unclear, overly cautious instructions, leading to ambiguity and inconsistency (Harris, 2014). Moreover, when administrators either impose top-down decisions or fail to provide strong leadership, teachers may feel undervalued, disengaged, or unsupported. Put another way, overconfident administrators who dismiss teachers' input or expertise can create a toxic work environment where innovation and collaboration are stifled. Conversely, underconfident leaders may struggle to inspire and motivate staff, resulting in a lack of enthusiasm and initiative (Bush, 2008). Administrators affected by the DKE may resist feedback from teachers, believing their own judgments are more accurate, and this can lead to a breakdown in communication, where administrators are unaware of the challenges teachers face and fail to provide the necessary support (Hallinger & Heck, 2010).

Certainly, the DKE can influence how curricula and language programs are developed and implemented. Administrators who overestimate their expertise may design curricula that are either overly prescriptive or focus too narrowly on certain aspects of language learning, such as grammar drills or exam preparation, potentially limiting students' overall language development by neglecting important areas like communicative skills, critical thinking, or cultural awareness. Overconfident administrators might also assume that the programs they implement are automatically effective, leading to superficial evaluations. They may dismiss or downplay negative feedback, resulting in programs that are not adequately refined or adapted over time. At the same

ISSN: 2582-0745
Vol. 7, No. 04; 2024

time, underconfident leaders might shy away from rigorous evaluation, fearing criticism or the exposure of gaps in their own understanding (Senge, 2006).

Without question, the DKE can certainly shape the organizational culture within ELT administrations. Overconfident administrators may adopt a hierarchical leadership style, where decisions are made at the top with little input from teachers, creating a culture of compliance rather than collaboration, where teachers feel their professional expertise is not valued or utilized. Underconfident leaders might foster a risk-averse culture where experimentation and innovation are discouraged. As such, teachers may be reluctant to try new methods or technologies if they perceive that the administration lacks confidence in exploring new approaches, which can hinder the institution's ability to adapt to changing educational needs or incorporate new pedagogical trends (Marzano et al., 2005). In addition, administrators who misjudge their abilities may struggle to articulate a clear, consistent vision for the institution. Overconfident leaders might set unrealistic goals, leading to frustration and burnout, while underconfident leaders might fail to provide a coherent direction, resulting in a lack of focus and fragmented efforts (Lumby & Foskett, 2011).

The DKE can also influence how ELT administrations handle accreditation processes and quality assurance. For example, overconfident administrators may assume that their programs meet all accreditation standards without thoroughly reviewing or addressing areas of non-compliance, leading to issues during audits or evaluations, putting the institution's accreditation at risk. Oppositely, underconfident administrators might overcompensate by excessively focusing on minor details or over-preparing documentation, leading to unnecessary stress and inefficiency during the accreditation process, which can divert attention from more strategic initiative (Spillane et al., 2004).

To mitigate the impact of the DKE in ELT, administrations can **promote collaborative decision-making** by involving teachers, students, and other stakeholders in decision-making processes. which can provide diverse perspectives and reduce the risks associated with overconfidence or underconfidence in leaders. This collaborative approach ensures that policies and initiatives are better aligned with classroom realities (Dinham, 2005). **Regular self-assessment and peer review** is another positive option, Encouraging administrators to engage in reflective practice and peer review can help them gain a more accurate understanding of their strengths and areas for growth. Structured feedback from colleagues, teachers, and external experts can provide valuable insights that counteract the DKE (Mulford & Silins, 2003). Moreover, **fostering a culture of continuous learning** by emphasizing the importance of professional development for administrators, as well as teachers, can help leaders stay informed about best practices and evolving trends in language education. This commitment to learning can prevent overconfident leaders from becoming complacent and help underconfident leaders build the skills they need to lead effectively. And guiding decision-making can help administrators base their policies on objective insights rather than personal biases (Rosenholtz, 1989),. Finally, regularly reviewing student outcomes, teacher performance data, and feedback can provide a more accurate picture of the institution's needs and successes (Stoll & Fink, 1996).

10. CAUSES OF THE DKE FOR ELT ADMINISTRATIONS

ISSN: 2582-0745
Vol. 7, No. 04; 2024

The DKE, a cognitive bias where individuals with limited knowledge or competence in a domain overestimate their abilities, can also manifest in ELT administrations. In these settings, administrators may misjudge their own understanding of language teaching, leading to decisions that negatively impact teachers, students, and the overall learning environment. One of the primary causes is that many administrators lack a deep understanding of language teaching methodologies. ELT administrators may come from administrative, business, or even non-educational backgrounds and may not have specialized knowledge of language teaching. Without this expertise, they may underestimate the complexity of language acquisition and overestimate their ability to make decisions regarding curriculum design, teacher evaluation, and instructional strategies. What's more, administrators may have outdated knowledge of language teaching practices, leading them to make decisions based on methods that are no longer considered effective. For example, they might prioritize grammar-translation methods over more communicative, student-centered approaches without realizing that modern research supports the latter (Sergiovanni, 2007). Administrators may impose policies or curriculum changes without adequately consulting teachers or considering the practical implications. This overconfidence can stem from a belief that their authority or position inherently qualifies them to make the best decisions, even when they lack firsthand classroom experience (Earley & Weindling, 2004). Administrations need to be wary of one -size-fits-all approaches – meaning, administrators may assume that a single approach or policy will work across all classrooms and student populations, overlooking the need for tailored strategies, which can lead to a rigid and ineffective educational environment where teachers have limited flexibility to address diverse student needs. In many cases, administrators may be removed from the day-to-day realities of teaching, leading to misguided assumptions, Moreover, they may lack classroom experience. This can be a serious issue as administrators who have never taught English or who have not been in the classroom for a long time may rely on theoretical knowledge rather than practical understanding, which can lead to misjudgments about what is feasible or effective in the classroom. Furthermore, when administrators do not regularly engage with teachers or observe classroom activities, they may form inaccurate perceptions about what is happening in their schools, and this disconnect can result in policies that are misaligned with teachers' actual needs and students' learning conditions (Kotter, 1996).

A focus on standardized assessments and metrics can exacerbate the DKE. There can easily be misinterpretation of data as administrators may overestimate their ability to interpret data from assessments and evaluations (**Argyris & Schön, 1996).** For example, they might place excessive emphasis on test scores while ignoring other important indicators of language proficiency, such as communicative competence or cultural understanding. Also, by focusing narrowly on metrics like exam results, graduation rates, or attendance, administrators might ignore qualitative factors like student engagement, creativity, or critical thinking skills that are vital in language learning (Bush et al., 2010).

Administrators may also resist learning new approaches or engaging in professional development as they believe they've already mastered educational leadership and may not see the need for ongoing learning or professional development. Such overconfidence can lead to an inability to adapt to new research, trends, or technological advances in ELT. Comfort zones can also be vexing as some administrators may prefer sticking to familiar practices and avoid venturing into

ISSN: 2582-0745
Vol. 7, No. 04; 2024

unfamiliar or innovative territory, even if it is beneficial for students and teachers (Bolman & Deal, 2017).

11. SIGNIFICANT EFFECTS OF THE DKE FOR ELT ADMINISTRATIONS

When administrators misjudge their competence, it can lead to i**nappropriate curriculum design** with overconfident administrators might design curricula that do not reflect current best practices in language teaching. This can lead administrators to set goals or expectations that are either too high or too low. Overconfidence can lead them to assume that all students should reach the same level of proficiency within a fixed timeline, disregarding individual learning differences and challenges.Then there is the issue of micromanagement.Administrators who overestimate their knowledge may feel the need to control every aspect of teaching, dictating lesson plans, instructional methods, and even assessment techniques, which can demoralize teachers and reduce their sense of professional autonomy, leading to disengagement or high turnover rates (Fullan, 2001). Ineffective teacher evaluations is yet another thing administrations have to think deeply about, especially as they mayimplement evaluation systems that do not accurately reflect teaching quality (Miller & Bartlett, 2012). For example, they might rely too heavily on student test scores or superficial observations, resulting in evaluations that fail to support teachers' professional growth or accurately assess their effectiveness. Resistance to new ideas comes up time and time again, Administrators who believe they know best may dismiss suggestions for new teaching strategies, technologies, or approaches that could benefit students, and this can create a stagnant learning environment where both teachers and students are denied opportunities for growth and improvement.

Unquestionably, the overall culture of the school can suffer under the influence of the DKE. To illustrate, administrators who overestimate their competence may adopt an authoritarian style, discouraging open communication and feedback, which can create a toxic culture where teachers and staff feel undervalued and are reluctant to voice concerns or offer new ideas. The thee is the issue of inequitable resource allocation – meaning, administrators may misallocate resources by focusing on areas they incorrectly deem as high priorities (Lortie, 2009).

12. WAYS TO OVERCOME THE DKE FOR ELT ADMINISTRATIONS

Reflective practices can help administrators gain a more accurate understanding of their strengths and areas for growth: Encouraging administrators to regularly assess their own decisions and seek feedback from teachers and staff can help them become more aware of potential blind spots. Reflective tools like leadership journals or 360-degree feedback can be valuable. Engaging with experienced mentors or coaches can also help administrators reflect on their practices, challenge assumptions, and develop more effective leadership strategies. Moreover, involving teachers and other stakeholders in decision-making processes can lead to more informed and balanced outcomes. Forming committees that include teachers, curriculum specialists, and language experts ensures that decisions are made with input from those with firsthand experience and expertise (Edge, 2011). Additionally, creating opportunities for regular dialogue between administrators and teachers fosters a more democratic environment. Listening to teachers' insights and incorporating their suggestions can lead to more effective policies and increased buy-in from staff.. Like teachers, administrators should be encouraged to engage in continuous learning. Administrators, even those without a background in ELT, should receive training on the latest research, best

ISSN: 2582-0745
Vol. 7, No. 04; 2024

practices, and challenges specific to language teaching, which can help them make more informed decisions and reduce the gap between their perceived and actual competence (Gebhard, 2006). Conferencing and networking is beneficial too. Attending educational conferences, workshops, and connecting with other ELT leaders can expose administrators to new ideas and successful strategies implemented in other institutions, which can help them reassess their own practices. Using a balanced approach to data can also help administrators avoid over-reliance on flawed interpretations (Borg, 2015). Administrators should be trained to analyze both quantitative and qualitative data when making decisions, to include considering test scores alongside student engagement, teacher feedback, and classroom observations to form a comprehensive view of what's happening in the school. This may not be enough though. Regular audits of existing policies and practices, combined with data-driven reviews, helps ensure that decisions are based on evidence rather than assumptions or outdated beliefs (Larrivee, 2000).

13. RELATED AND INFLUENTIAL BIASES OVER THE YEARS

As stated above, the DKE is a cognitive bias in which *people with limited competence in a particular domain overestimate their abilities,* Knowing the origins, there are several related and influential biases. The first is an anchoring bias, which simply means that there is a tendency to rely too heavily on the first piece of information encountered (the "anchor") when making decisions. In language learning, a student's initial success might anchor their perception of their overall ability, leading to overconfidence (Epley & Gilovich, 2006). Next is the bandwagon effect or the the tendency to do or believe things because many other people do or believe the same (Asch, 1955). In a classroom, students might overestimate their language abilities if they perceive their peers are doing well regardless of their actual performance. Then we have the category size bias, which is the propensity to make judgments based on the size of a category rather than the actual probability (e.g. students might believe they are proficient in English if they perform well in a large category of basic words, ignoring more complex aspects of language proficiency) (Fox & Rottenstreich, 2003). Cognitive dissonance is another one. Thus is the mental discomfort experienced when holding two contradictory beliefs (Festinger, 1957). A student may downplay their errors or avoid challenging tasks to reduce the dissonance between their belief in their proficiency and the reality of their mistakes. Optimism Bias clearly plays a role as it's the penchant to overestimate the likelihood of positive outcomes (Sharot, 2011). Language learners might believe they will acquire proficiency quickly, underestimating the challenges and time required. Planning phallacy is the proneness to underestimate the time, costs, and risks of future actions. Students might believe the fallacy that they can learn English faster than is realistic, leading to frustration and potential disengagement (Buehler et al., 1994). Prediction Bias is the predilection to be overconfident in predicting one's future abilities (Kahneman & Tversky, 1979) (e.g. a novice teacher might predict that their students will achieve high proficiency in a short time, leading to unrealistic expectations). Finally, there's the hard-easy effect, which us a tendency to be overconfident in easy tasks and underconfident in hard tasks (Lichtenstein & Fischhoff, 1977) (i.e. student might overestimate their ability to perform well on simple vocabulary tests but underestimate their ability to master complex grammar).

In summary, the DKE doesn't exist in a vacuum, but rather significantly impacts English language teaching based on a range of cognitive biases that contribute to learners' overestimations of their abilities.

ISSN: 2582-0745
Vol. 7, No. 04; 2024

First, **anchoring bias** may lead students to base their self-assessment on initial successes, fostering overconfidence. The **bandwagon effect** encourages this overconfidence as students may believe they are performing well simply because their peers seem to thrive, regardless of their actual skills. Similarly, the **category size bias** can cause learners to feel proficient based on their performance in a broad category of simple tasks, disregarding the complexities of true language mastery. **Cognitive dissonance** also plays a role, as students often downplay mistakes to reconcile their self-image with their actual performance, while **optimism bias** leads them to underestimate the time and effort needed to achieve fluency. The **planning fallacy** reflects a common tendency to misjudge the time required for learning, leading to frustration when progress does not match expectations. Coupled with **prediction bias**, which manifests as overconfidence in forecasting future abilities, and the **hard-easy effect,** where students feel overly confident in simple tasks but insecure in more challenging ones, these biases collectively reinforce the DKE. Thus, they create a misleading perception of proficiency, which can hinder effective language learning and teaching strategies.

14. CONCLUSION

In conclusion, the DKE presents significant challenges in ELT environments at multiple level – from students to teachers and administrators. This cognitive bias, characterized by individuals with lower ability overestimating their competence while those with higher ability may underestimate theirs, highlights the critical need for self-awareness and accurate self-assessment in the educational sphere. As explored throughout this paper, the DKE affects students' learning trajectories, often resulting in inflated self-assessments or debilitating self-doubt that can hinder language acquisition and growth.

Moreover, teachers are not immune to the effects of the DKE, as it shapes their instructional choices, professional development engagement, and interactions with students. Administrators, too, face risks associated with this bias, which can lead to misguided policy decisions and misallocation of resources, ultimately impacting the quality of education provided.

To mitigate these pervasive effects, it is essential to foster metacognitive awareness, implement constructive feedback mechanisms, and encourage reflective practices across all levels of the ELT environment. By cultivating an understanding of cognitive biases and promoting a growth mindset, educators and administrators can create a more supportive and effective learning atmosphere that values realistic self-assessment and continuous improvement. In doing so, they can help both students and teachers navigate the complexities of language learning and teaching more effectively, leading to enhanced outcomes and a richer educational experience overall.

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