Effect of Exam-Focused and Teacher-Centered Education Systems on Students' Cognitive and Psychological Competencies

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Abstract

This Paper undertakes a thorough analysis of how students' cognitive and psychological competencies are influenced by education systems that prioritize exams and center teaching around instructors. Analyzes the limitations of traditional models and suggests alternative approaches to improve the learning experience by examining the literature as a research method and drawing on various scientific references. The teacher-centered educational model, characterized by rote learning and standardized testing. It has been examined for its potential to inhibit critical thinking and creativity. Psychologically, the study investigates in depth the work of Madigan, Curran, and Lonsdale (2016) and Carol Dweck (2006) to highlight the stress and fixed mindset associated with high-stakes exams. The pressures created by exam-oriented systems are explored, shedding light on the potential damage to teacher-student relationships and the overall quality of education. Additionally, the weaknesses of exam-oriented education, such as student-centeredness and lack of practical applications, are discussed. The article emphasizes the necessity of moving towards student-centered models that take individual differences into account, encourage active participation, and prioritize holistic development. To solve these problems, various solutions are proposed in the article. Cognitively, the article underscores the importance of balancing test preparation with student-centered learning. The article promotes a reimagined pedagogical strategy that emphasizes the all-encompassing growth of students, equipping them not just for examinations but also for the intricacies of life outside traditional academic settings. The extensive references cited contribute to a well-rounded comprehension of the intricacies and potential remedies linked to education systems focused on exams and centered around teachers.

Keywords: Exam-Focused Education System, Teacher-Centered Education System (Model), Students-Centered Education Model, Cognitive Competencies, Psychological Competencies, A Balanced Approach
Introduction

In a rapidly evolving world where the demand for dynamic skills and innovative thinking is soaring, the pedagogical methods of our educational institutions are under scrutiny. A significant portion of the global education system still leans heavily on traditional models: exam-focused and teacher-centered approaches. This paper aims to discover the impact of these educational paradigms on students' cognitive and psychological competencies, drawing on a range of academic references to support the analysis. In a rapidly evolving world where the demand for dynamic skills and innovative thinking is rapidly increasing, the pedagogical methods of our educational institutions are under scrutiny. A significant part of the global education system still relies heavily on traditional models: exam-oriented and teacher-centered approaches. This paper also, aims to investigate the effect of these educational paradigms on students' cognitive and psychological competencies, drawing on a variety of academic references to support the analysis.

The article first gave general information about the conceptual framework, both the student-centered education approach and the teacher-centered education approach were analyzed and their weaknesses and strengths were investigated. The article also, revealed the fundamental differences between both approaches. Then critically examined its negative aspects and its negative aspects on students (cognitive and psychological impact on the student). Then proposes a student-centered education system as an alternative to this approach.

In this article, the Pressures of the Exam-Oriented Education System and the Weaknesses of Exam-Oriented Education are examined. It examined the cognitive and psychological effects of the exam-focused education system on students, identified Suggestions for Solutions to Exam-Focused Education Problems and proposed a balanced approach.

Researching Method

To unravel the intricate dynamics of the impact of exam-focused and teacher-centered education, a qualitative research method was employed. A comprehensive review of existing literature was conducted, drawing insights from academic studies, theoretical frameworks, and empirical evidence. The qualitative approach allowed for a nuanced exploration of the multifaceted consequences, capturing the experiences and perceptions of educators, students, and other stakeholders. The literature review spanned diverse disciplines, encompassing educational psychology, pedagogy, and cognitive sciences. A comprehensive insight into the topic was achieved through the synthesis of academic articles, books, and pertinent online sources. This methodological approach was chosen to shed light on the overarching effects of educational paradigms on both cognitive and psychological competencies.

Findings

The findings of this research underscore the profound impact of exam-focused and teacher-centered education systems on students' cognitive and psychological competencies.
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The pressures of constant testing were identified as leading to a narrowed curriculum, hindering the development of critical thinking and problem-solving skills. "Teaching to the test" emerged as a prevalent practice, emphasizing memorization over comprehension.

In terms of psychological competencies, the study revealed that high-stakes testing contributes to heightened stress levels and the adoption of a fixed mindset among students. Test anxiety was identified as a significant factor negatively influencing both academic performance and overall well-being. The curriculum's narrowing, intensified by rigorous exam preparation, continued to undermine the importance placed on critical thinking and problem-solving skills—crucial elements for the comprehensive development of students.

Conceptual Framework

Philosophies of Education

Philosophy of education seeks to analyze educational concepts, explore assumptions, and provide answers to questions related to educational processes, curriculum, and learning content (Günindi, 2009). Klipatrick views the philosophy of education as an effort to determine what education should do (Ergün, 1996). Brauner and Burns (1965) consider the philosophy of education as the adaptation of philosophical thought to educational systems, emphasizing the meaningful connection between philosophy and education: when education departs from philosophy, it is like a blind person losing their way without a guide dog. In this sense, philosophy and education walk together, mutually constituting each other, engaging in an exchange of ideas and actions (Brauner and Burns, 1965).

Educational philosophies primarily consist of four currents: perennialism, essentialism, reconstructionism, and progressivism. Perennialism is considered the oldest educational philosophy, with roots dating back to Realism (Erden, 2004). According to Perennialism, education is a prerequisite for instruction, and without education, instruction cannot be sustained; instruction, in turn, constitutes the fundamental source of knowledge (Asmaz, 2019). According to proponents of Perennialism, the goals of education include the development of the human mind and thought structure, ensuring its adaptation to universal truths, and the correct and effective use of the mind's rules. In pursuit of these objectives, teachers ought to impart not just fundamental skills like reading, writing, and arithmetic but also instill moral education, as highlighted by Karadağ, Baloğlu, and Kaya (2009).

In the Perennialism educational approach, teacher is the authority and leader in the classroom. The expert teacher is central to instruction from beginning to end (Erden, 2004), making it incompatible with a student-centered education model.

Essentialism is thought to be rooted in a blend of both realistic and idealistic philosophical perspectives (Erden, 2004). Globally acknowledged as the most extensively embraced and enduring educational philosophy, it has been in practice for an extensive duration (Karadağ et al., 2009). Unlike most educational philosophies that emerged in opposition to a current, Essentialism arose due to the inadequate reflection of disciplinary fields and past...
values in education programs. It shows consistency with many educational philosophies (Asmaz, 2019). Essentialism in education is oriented toward imparting knowledge that holds practical relevance in real-life scenarios, often referred to as culturalization, to students. Since the most important elements in educational environments are subjects and lessons, the teacher, seen as the representative of cultural heritage, is central, not the student (Güniş, 2009).

According to Essentialism, students are generally regarded as societal and cultural beings, lacking any inherent knowledge or skills. The teacher is responsible for imparting this knowledge and these skills to the students, making Essentialism an approach centered on teachers and unsuitable for a student-centered education model (Karadağ et al., 2009).

Reconstructionism, stemming from the philosophical roots of pragmatism, is seen as an extension of progressive educational philosophy. In alignment with this perspective, education, according to reconstructionist philosophy, is geared towards the restructuring of society. Schools, within the context of fostering social change, are entrusted with the role of instigating reform movements to usher in a novel societal order, employing students as active agents in this transformative process (Varış, 1998). Therefore, Reconstructionists argue that an education program should address unsolved or debated problems in contemporary communities, such as unemployment, environmental pollution, poverty, class distinction, and health issues. Reconstructionism aligns itself with a community-centered education program (Güniş, 2009). John Dewey, one of the pioneers of Reconstructionism, believes in creating an educational environment where individuals can freely use their abilities and skills, express themselves by considering students' ideas, and develop their ability to express themselves. In this context, Reconstructionism appears to be close to a student-centered education approach (Asmaz, 2019).

Progressivism's foundation lies in adapting pragmatic philosophy to education. John Dewey, influenced by Charles Sanders Peirce and William James in pragmatic thought, applied pragmatism to education, giving it a new meaning called "progressivism" (Yıldız, 2014). Dewey, with his progressive education approach, argues that students can express themselves more comfortably in a democratic environment, participate actively in class, and learn information by living and doing through the activities and tasks they perform in class. He claims that this approach will benefit students in their daily lives and make knowledge more lasting. Although Dewey has contributed to the emergence of a "reconstructive" educational movement by revealing the shortcomings of the progressive education approach, he mostly realized his educational understanding in line with progressive education (Yıldız, 2014). Dewey, opposing a teacher-centered and rote-based educational approach, emphasized the importance of creating a student-centered education system, filling this new approach with concepts such as democracy, freedom, and culture (Yıldız, 2014). Progressivism, prioritizing democratic educational settings, rejecting conventional knowledge dissemination, and offering students the chance to participate in activities and research, aligns well with the principles of student-centered education (Asmaz, 2019).
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Educational Approach Centered on Teachers

Within the realm of a teacher-centered learning methodology, characterized by a more traditional and orthodox teaching approach, the instructor serves as a conventional classroom presenter. The central role entails the teacher delivering information to the students, who are anticipated to passively acquire the knowledge. In an educational setting centered on teachers:

Focus on the Instructor: The primary focus is on the instructor, The teacher selects the topics, The teacher communicates, and students listen attentively and Priority is given to the teacher's expertise on the subject.

Student Independence: Students generally work alone or independently, The teacher monitors and corrects student work as necessary, The teacher bears sole responsibility for addressing students' questions and Evaluation of students' performance and evidence of learning is done by the teacher.

Classroom Atmosphere: The classroom is typically characterized by a quiet atmosphere.

Benefits of a Teacher-Centered Classroom:

Order and Control: The teacher has complete control over the classroom and activities, Full control minimizes concerns about students missing essential material and A focused approach to research, planning, and preparation benefits the class.

Teacher Confidence: Teachers feel comfortable, confident, and in charge of classroom activities, Students always know where to direct their attention — to the teacher.

Drawbacks of a Teacher-Centered Classroom:

Potential Boredom: The method works best when the instructor can make the lesson interesting; otherwise, students may become bored and miss crucial information.

Limited Collaboration: Students work independently, missing opportunities to share the discovery process with their peers. Collaboration, a valuable skill in both school and life, is discouraged.

Skills Development: Students may have fewer opportunities to develop communication and critical thinking skills in a teacher-centered approach.

Student-Centered Education

In the student-centered teaching approach, the focal point of the instructional process is the student, emphasizing their central role in the learning experience. It entails taking into account the individual traits of students, integrating them into instructional decision-making, and empowering students to actively participate in the learning process. In student-centered instruction, foremost consideration is given to students' needs, interests, abilities, and learning styles, and the instruction is built upon these foundations (Mundhenk, 2004).

Student-centeredness, in essence, involves understanding the unique qualities and differences of students (Mundhenk, 2004). Variations in students' developmental levels,
interests, and goals make their needs distinct. Moreover, students who have experienced
different learning environments, both inside and outside of school, exhibit differences in their
readiness for new learning experiences. On the other hand, students also have varying
tendencies and preferences when it comes to learning and studying. These characteristics,
referred to as learning styles, are formed through the combination of students’ physical,
sensory, and cognitive activities and are consistently and continuously carried out by students.
In instruction organized according to all these characteristics, students’ learning becomes more
meaningful and lasting.

Various definitions have been proposed regarding student-centered education. Examples
of these definitions are as follows:

Student-centered education, as conceptualized by Moffett and Wagner (1992), involves
students engaging with each other in the classroom, actively participating in activities, and
teachers creating an educational environment that fosters lasting learning. According to Unin
and Bearing (2016), it is a significant educational approach that motivates students to play an
active role in the learning process, placing a strong emphasis on the importance of
comprehension and learning. Kökdemir (2003) characterizes student-centered education as a
model where the teacher and classroom tools serve as assistants and guides in learning, with
students taking responsibility for their own educational journey.

A pivotal factor contributing to the shift towards student-centered education is the
constructivist learning theory, advocating for the implementation of activity principles in
education, ensuring active learning, and structuring knowledge to become ingrained through
learning is described as an active process where students intelligently explore organized
information. The student-centered education model is based on philosophical movements such
as pragmatism, considering education as part of life, being practical, and rejecting rote
memorization; and educational philosophies such as progressivism and reconstructivism
(Özpolat, 2013).

In student-centered instruction, students actively participate in all aspects of instructional
planning, implementation, and evaluation, granting them a say in matters pertaining to their
learning journey. They are provided with choices and actively engage in decision-making
processes, fostering a realization of their role in the learning process and subsequently
enhancing motivation (CEFLC, n.d.). This approach emphasizes the importance of students
being active learners, distinct from traditional methods where they passively receive
information.

Unlike traditional models where students are passive recipients, student-centered
instruction views students as individuals actively constructing knowledge through high-level
cognitive activities. Thus, it prioritizes providing active learning experiences over traditional
teaching methods, holding students accountable for their learning resources, presenting them
with open-ended, critical, and creative problem-solving tasks, assigning non-traditional writing
assignments, and facilitating collaborative learning that allows students to progress at their own
pace (Felder & Brent, 1996).
According to Wilbert J. McKeachie's perspective, the essential characteristics of student-centered teaching and learning encompass:

- Building trust to enable students to explain their views and ask questions, without damaging their relationships with other students or the teacher.
- Emphasizing discussions among students rather than their participation in class or question-answer activities.
- Focusing on deep learning rather than memorization of facts and definitions.
- Fostering an environment where students are empowered to make decisions in their learning process, prioritizing their innate motivation over a learning approach driven solely by tests or grades.
- Giving more importance to students' learning objectives and aligning the instruction with those objectives.
- Prioritizing the attainment of affective outcomes in students' learning.
- Emphasizing the importance of students' misconceptions in learning and their rectification.

**Student-Centered Learning Environment and Learning**

In the realm of student-centered learning environments, a fundamental understanding for effective teaching and learning revolves around a pivotal concept: the focus shifts from how the teacher imparts knowledge to how the students undertake the learning process. In essence, student-centered teaching places a central emphasis on students' learning experiences. The facilitation of students' learning occurs through the creation of an environment conducive to self-directed knowledge construction, fostering social interactions, and presenting authentic scenarios. Operating on the principles of constructivist learning, the student-centered learning environment is purposefully designed for the advancement of students' learning, aligning with the same foundational principles. A visual representation of the core elements defining the student-centered learning environment is depicted in Figure 2.1, derived from a UNESCO study (2002, p. 24). Can be said to have the following core elements:

- Interaction elements: Teacher, students, technology, information sources.
- Interaction facilitation elements: Realistic tools, authentic contexts, realistic tasks or activities.
- Learning support elements: Special education or support, multiple perspectives, collaborative learning, reflection.
- Evaluation element: Authentic performance of the student.
The figure illustrates a learning model wherein the learner occupies a central position within an environment optimized for effective learning. It shows how different elements, such as authentic context, tools, and tasks, as well as coaching, scaffolding, and collaboration, can support the learner’s development and engagement. The model also highlights the role of technology, information resources, multiple perspectives, and reflection in enhancing the learning process.

Comparison of Teacher- and Student-Centered Education

Student-centered teaching differs from teacher-centered teaching in several ways. The primary differences can be outlined comparatively as follows:

<table>
<thead>
<tr>
<th></th>
<th>Teacher-Centered</th>
<th>Student-Centered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity In The Classroom</strong></td>
<td>Tutorial/Teacher</td>
<td>Interactive</td>
</tr>
<tr>
<td><strong>The Role Of The Teacher</strong></td>
<td>Informative, always an expert</td>
<td>Participant, sometimes student</td>
</tr>
<tr>
<td><strong>The Student's Role</strong></td>
<td>Listener, always a student</td>
<td>Participant, sometimes expert</td>
</tr>
<tr>
<td><strong>Class Workload</strong></td>
<td>Information</td>
<td>&quot;Relationships&quot;</td>
</tr>
<tr>
<td><strong>Knowledge Acquisition</strong></td>
<td>Accumulation of memory and rote knowledge</td>
<td>Inquiry and discovery, the transformation of information into new knowledge</td>
</tr>
<tr>
<td><strong>Indicator Of Success</strong></td>
<td>Quantity</td>
<td>Quality</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Measurement</th>
<th>According to the norms</th>
<th>According to the measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Usage</td>
<td>&quot;Repeat and practice&quot;</td>
<td>Communication, participation, access to information</td>
</tr>
</tbody>
</table>

**Table 1: Comparison of Teacher- and Student-Centered Education/Resource:** (Dwyer, 1994)

In table 1, it is clearly seen that student-centered teaching encompasses many practices different from teacher-centered teaching, from setting learning objectives to assessment. Unlike teacher-centered teaching, student-centered teaching involves active participation by students throughout all stages of the educational process. Consequently, students not only take an active role in the teaching-learning dynamic but also assume responsibility for their individual learning journeys. The pedagogical approach shifts its focus from rote memorization to promoting research and discovery, with an emphasis on collaborative learning over individual study. The evaluation of students’ learning outcomes is a collaborative effort, encompassing not only traditional tests but also performance assessments, portfolio submissions, and various other artifacts. These transformative elements contribute significantly to reshaping the roles of both teachers and students within the teaching-learning continuum.

**Teacher- and Student-Centered Teaching**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Teacher-Centered Teaching</th>
<th>Student-Centered Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach to Planning</td>
<td>Organized by the teacher's objectives and content.</td>
<td>Based on student needs, interests, and abilities.</td>
</tr>
<tr>
<td>Consideration of Student Needs</td>
<td>Focuses on the teacher's perspective.</td>
<td>Focuses on understanding and accommodating student needs.</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>Predetermined activities designed by the teacher.</td>
<td>Activities driven by student interests and choices.</td>
</tr>
<tr>
<td>Emphasis on Learning</td>
<td>Students memorize facts and information.</td>
<td>Encourages students to explore, research, and apply knowledge.</td>
</tr>
<tr>
<td>Role of Students</td>
<td>Passive recipients of knowledge.</td>
<td>Active participants in their own learning.</td>
</tr>
<tr>
<td>Learning Style</td>
<td>Directed by teacher instructions.</td>
<td>Allows for diverse learning styles and approaches.</td>
</tr>
<tr>
<td>Motivation</td>
<td>External factors such as grades and rewards.</td>
<td>Emphasis on intrinsic motivation and personal interests.</td>
</tr>
<tr>
<td>Study Environment</td>
<td>Often teacher-controlled and structured.</td>
<td>Flexible, adapting to student needs and collaboration.</td>
</tr>
</tbody>
</table>
Table 2: Comparison of Teacher- and Student-Centered Teaching.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Teacher-Centered Teaching</th>
<th>Student-Centered Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual vs. Group Work</td>
<td>Limited emphasis on group activities.</td>
<td>Encourages collaborative and independent work.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Evaluation based on standardized tests and exams.</td>
<td>Diverse assessment methods, including projects and presentations.</td>
</tr>
<tr>
<td>Feedback</td>
<td>Mainly provided by the teacher.</td>
<td>Encourages self-assessment and peer feedback.</td>
</tr>
</tbody>
</table>

The Legacy of Teacher-Centered Education

In the teacher-centered model of education, the instructional dynamic positions the teacher as the central figure in the learning process. Students typically assume a more passive role, receiving knowledge from the teacher, who serves as the predominant source of information and authority within the classroom. This approach is characterized by rote learning, structured curriculum, and a strong emphasis on standardized testing. The teacher-centered model of education is a traditional approach that has been used widely across different educational settings. In this model, the teacher is the primary authority in the classroom, guiding the learning process and delivering knowledge to students who are expected to passively absorb it. The focus is often on rote learning and preparation for standardized tests, rather than on developing critical thinking skills or fostering student autonomy.

Studies have found that teacher-centered education can lead to a range of outcomes for students. For example, a study by Sesen and Tarhan (2011) showed that active learning, in contrast to teacher-centered instruction, promoted better understanding in learning acids and bases (Taylor & Francis). Another study published in BMC Medical Education suggested that moving away from teacher-centered methods could promote self-regulated learning, even among students who were strongly accustomed to teacher-centered approaches (Matsuyama, Nakaya, Okazaki, Lebowitz, Leppink & Van Der Vleuten 2019).

Nonetheless, teacher-centered approaches come with their own set of advantages. Advocates argue that such approaches help maintain a well-organized and disciplined learning environment, fostering what some believe to be more effective learning outcomes for students. However, detractors contend that teacher-centered learning may hinder students’ educational progress by limiting opportunities for active engagement and participation, essential for fostering profound understanding and the cultivation of advanced cognitive skills (Lak, Soleimani, & Parvaneh, 2017). The teacher-centered model often relies on external behavior modifications, such as rewards and punishments, for classroom management, potentially influencing students’ motivation and their perception of the learning process (Garrett, 2008). This stands in contrast to more constructivist methodologies, where students are viewed as active knowledge builders, and the teacher assumes a role as a facilitator rather than a director of learning (Altun, 2023). Although teacher-centered education has been a prevalent method...
in classrooms worldwide, an accumulating body of evidence suggests that its impact on students' cognitive and psychological competencies may be comparatively limited when juxtaposed with more student-centered approaches. A shift toward models that promote active learning and student involvement appears to align better with preparing students for the challenges of the 21st century.

**Cognitive Competencies**

While this model can efficiently transmit factual knowledge and prepare students for exams, it has been criticized for stifling critical thinking and creativity. According to L. Vygotsky's social development theory, cognitive development is fueled by social interactions and collaborative problem-solving (Vygotsky, 1978). In a teacher-centered approach, the potential limitation on these interactions could impede students' capacity to cultivate higher-order thinking skills. Lev Vygotsky's theory of social development underscores the pivotal significance of social interaction in cognitive development. According to Vygotsky, learning is inherently a social process, and our cognitive capabilities are intricately intertwined with and emerge from our engagements with others. His theory suggests that through collaborative problem-solving and dialogue, students can develop higher-order thinking skills that extend beyond mere rote memorization (Tudge, & Winterhoff, 1993).

However, a teacher-centered approach, where the teacher directs learning and students are passive recipients of knowledge, may limit these essential social interactions. This could potentially hinder students from developing critical thinking and creativity, which are crucial cognitive competencies for success in today's world (Altun, 2023).

Research has shown that teacher-centered education, which often relies on extrinsic motivation, may not provide adequate opportunities for students to engage in critical thinking or creative exercises. Instead, it may foster an environment where students are less likely to question, explore, and take intellectual risks (Garrett, 2008).

In contrast, teachers who prefer student-centered teaching styles place more importance on activities that promote thinking, and these teachers tend to have higher self-efficacy levels. This implies that more student-centered approaches may better support the development of cognitive competencies such as critical thinking and creativity (Dilekli, & Tezci, 2016).

Further studies have highlighted that when teachers exhibit creativity in their teaching, it can positively influence students' critical thinking skills, especially in contexts such as EFL learning (Khatami, Lai, He, & Haji-Othman, 2023). The traditional "teacher-centered" classroom model has been criticized for resulting in poor teaching outcomes and insufficient teaching content in depth and breadth, suggesting a need for more innovative and engaging teaching methods (Xu, & Guo, 2018, June). While teacher-centered education can effectively transmit factual knowledge, it may impede the development of critical thinking and creativity. Vygotsky's theory underscores the importance of social interaction in the cognitive development, advocating for a shift towards more collaborative and student-centered learning environments to cultivate these essential cognitive competencies.
Psychological Competencies

Psychologically, the teacher-centered approach may impact students' motivation and self-esteem. According to Deci and Ryan's self-determination theory, intrinsic motivation is contingent on fulfilling three psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985). A system that restricts student choice and prioritizes performance may jeopardize these needs, resulting in reduced motivation and heightened anxiety.

The teacher-centered model, positioning the teacher as the primary authority over knowledge and control within the classroom, can have repercussions on students' psychological well-being. Autonomy, denoting independence and the freedom to choose one's actions, is a crucial psychological need. Providing students with opportunities to make decisions and exert control over their learning process can enhance motivation and engagement. In contrast, a teacher-centered approach, characterized by limited student autonomy and minimal input in the learning process, has the potential to undermine this sense of autonomy.

**Competence relates to the feeling of being capable and effective in a particular domain.** When students perceive themselves as competent in their academic pursuits, it boosts their self-esteem and motivation. In a teacher-centered approach, where the focus is primarily on performance and evaluation, students may experience heightened pressure and anxiety, which can hinder their sense of competence.

**Relatedness refers to the need for social connection and belongingness.** Positive relationships and a supportive social environment in the classroom foster students' motivation and well-being. In a teacher-centered approach that emphasizes teacher-student interactions over peer interactions, the sense of relatedness among students may be limited.

To address these concerns, an alternative approach called the student-centered approach places greater emphasis on student autonomy, active participation, and collaboration. It encourages student choice, self-directed learning, and cooperative learning strategies. This approach aims to promote students’ intrinsic motivation, self-esteem, and overall psychological well-being.

The Pressures of an Exam-Focused Education System

An exam-focused education system, which prioritizes standardized testing as the primary measure of student success, carries several pressures. This model can be seen in systems that utilize high-stakes exams for advancement or admission to higher education, such as the Gaokao in China or the SAT in the United States, for instance.

One of the main pressures of an exam-focused education system is the potential suppression of creativity and critical thinking. A rigid focus on exams may limit students' abilities to explore diverse learning paths and develop a broad range of skills. This is because the well-being and performance of students can be significantly impacted by the stress of high-stakes examinations (Liu, M. (2023). Traditional exams and evaluations can exert a stressful pressure on both students and teachers. The effect of testing on students can be enormous, leading to anxiety and muddy results. The dilemma for teachers is how to balance the teaching of exam-focused content with the broader educational goals of fostering creativity and critical thinking.
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thinking (Amrein, A. L., & Berliner, D. C. (2002), Wall, D. (2005). Another pressure point is the potential damage to teacher-student relationships. The pressure of high-stakes exams can put teachers under strain with targets, potentially straining relationships with students. This is especially true in systems where the high stakes are tied to teacher evaluations or school funding [1].

The hold down of high-stakes testing can lead to enormous anxiety and muddy results. Turning down the pressure may alleviate the problem, but it may lead to a loss of focus on academic achievement [2]. While an exam-focused education system may appear to measure student success accurately, it carries several negative implications. These includes suppression of creativity, increased stress and anxiety, strained teacher-student relationships, and potential damage to the quality of education. It is crucial for educators and policymakers to consider these factors when implementing such systems.

Weaknesses of Exam-Focused Education

While the exam-centered approach to education may reduce students' desire to learn, school exams and university entrance exams encourage young people to focus on exam results, causing them to focus only on certain subjects rather than a wide range of learning. This situation can cause students to experience excessive stress over their exam performance, which negatively affects their motivation to learn. Hence, placing greater emphasis on the holistic learning experience of students and prioritizing the value of the learning process itself, rather than fixating solely on examination outcomes, becomes imperative within the education system.

Absence of Student-Centric Approach: The examination-oriented educational framework commonly centers around a uniform curriculum and evaluation system, disregarding the diverse individualities among students, including their aptitudes, learning methods, and educational requirements. Given that each student possesses distinct learning speeds, methods, abilities, and styles, this system imposes constraints on students, neglecting their individual learning needs and treating them as a collective entity. Consequently, students might find themselves operating more like machines than human beings. By "machine," we refer to a system characterized by three stages: input, process, and output, where the output mirrors the input without accommodating individual variations.

Lack of Practical Applications: Exams generally measure theoretical knowledge and do not give students the opportunity to gain concrete skills. The learning experiences provided to students do not focus on real-world applications, which can lead to a lack of practical skills in graduating students' transition to the business world. This makes it difficult for students to enter working life after education. Even if they enter business life, they fail in their business lives due to the lack of practice in the education they receive and the exams they pass, which can cause them to be unhappy or alienated.

Suppression of Creativity: Exams often expect certain answers from students, and this can limit students' creative thinking abilities, ability to express themselves, and different perspectives. Because students are evaluated on predetermined answers, they may be limited
in developing alternative perspectives and finding their own solutions. As we mentioned before, the same answer is required from all students. This may considered as a system that can ensure the equality of students, but it is not a fair system at all.

**Inadequate Use of Various Assessment Methods:** Exam-oriented education generally fails to accept written and multiple-choice exams as the main measure of student performance. This can lead to an assessment practice that fails to adequately assess students' different learning styles and skill sets. In this system (exam-oriented education system), shrinking the learning horizon limits students' learning, understanding and reasoning abilities, their willingness to think and their opportunities to offer alternative perspectives. It is important to use various assessment methods so that students can fully express their abilities.

**Student Assessment-Focused Curriculums:** Exam-oriented education typically emphasizes written and multiple-choice exams that measure students' knowledge in an exam format over a period. This can result in a large part of the course curriculum containing preparation for exams. Students are often assessed on studying for exams, which can cause a tendency to focus on exam strategies rather than focusing on learning. Instead of thinking about what the information is, how it was obtained, the accuracy of the information, and even whether the information is useful, students think about what questions that will be asked in the exam and what information they need to memorize. This leads students to memorize information instead of making sense of it, thinking, judging, questioning and criticizing it.

**Surface Learning Approach:** Exams generally encourage the use of short-term memory and lead students to learn information superficially. This may cause students to tend to memorize rather than understand the topics. This can make it difficult to develop long-term comprehension and context-building skills.

**Student and School Evaluation Based on Exam Results:** The exam-oriented education system generally focuses on exam results to determine student success and evaluate schools. This can reduce students' learning experience to exam results and reduce the richness of the learning process. This system does not consider the student's health, psychological, economic, social and environmental situation at the time of the exam. Since these situations will reflect student’s study and exam results, student and school evaluation cannot be logical and fair in this system.

**Student Stress and Psychological Effects:** High levels of competition, family pressure, uncertainty of the future, and fear of exams and failure can cause psychological problems in students. This may lead students to not only focus on success but also neglect their mental health.

**Decreased Student Motivation:** Since exams often focus only on taking notes, students' motivation to learn based on genuine interest and passion may decrease. This may cause students to participate less in the learning process and focus only on the goal of passing the exam. Because their students think about the exam rather than their goals, thoughts, future dreams and self-realization, and because they read certain education and training materials, they learn to think narrowly and small and do not dream big. This can reduce their motivation. Because big dreams require big steps and big steps require big motivation.
University Entrance System: Exams force young people to shape their learning process based on their exam performance. In other words, a student cannot enter the university, faculty and department he wants if his scores are not sufficient. If a student's dream is to become a doctor, how can he study in the history department? If a young person's talents and abilities are to become a painter, why is he forced to study business administration? While a young person's dream and talent is to become an engineer, why do his scores push him to education faculties?

It is not possible to predict what the future of students, their families and the state will be like if they are not studying in the departments they want to be based on their abilities, thinking styles, talents and where they want to be. Because focusing on Exams limits the time students can devote to their overall development and in-depth learning. Additionally, the exam-oriented education system increases competition among students and may cause important social skills such as cooperation and teamwork to be pushed to the background. Critical thinking and problem-solving skills can be overlooked in the preparation process for exams, preventing students from using these skills in real-life applications.

Solution Suggestions to the Problem of Exam-Oriented Education

Student-Centered Education Model: Instead of exam-oriented education, a transition should be made to a student-centered education model. This model should take into account the individual differences of the students and include flexible curricula appropriate to their learning speed and style. This allows each student to maximize his potential. In education, it is crucial to prioritize students and their learning experiences. Weimer (2002) argues for a student-centered approach where traditional roles of teachers and students undergo necessary changes. Instead of the teacher being the "sage on the stage," they transform into a "guide on the side." In this model, students are not perceived as empty vessels waiting to be filled with knowledge; rather, they are seen as seekers on their intellectual development journey (Weimer, 2002).

The emphasis is on guiding students, not just in recording information, but along their unique paths of learning. Weimer firmly asserts that students learn best through active engagement in learning activities. When students actively participate, such as contributing to presentations or responding to the instructor's prompts for examples and summaries, they not only become part of the learning process but also learn from their peers. In activities like problem-solving sessions, students directly experience the learning journey. In-class engagements not only benefit students but also offer faculty valuable opportunities to guide them in clarifying their understanding and assimilating the subject matter in meaningful ways (Wright, 2011).

Baxter and Gray (2001) endorse the idea that active student involvement in the learning process contributes to more effective learning outcomes. This challenges the conventional view of students as passive recipients of information, leading to a shift where the teacher assumes the role of a facilitator rather than an exclusive expert in the subject matter (Tärnvik, 2007). Across various disciplines, literature showcases examples of this approach, such as peer-learning activities. An instance involves students not merely engaging in debates or reading
provided material but actively preparing and teaching a five-minute grammar lesson to their peers (Oldenburg, 2005).

**Strengthening Practical Applications:** Practical skills are as important as theoretical knowledge. Educational programs should include practical applications to provide students with concrete skills and develop their skills in generating solutions to real-world problems. This enables graduate students to enter the business world more prepared and competent. Otherwise, the knowledge that graduate students have does not match the business world, and the graduate student will remain unemployed while there are no workers in the business world.

**Evaluation Methods That Encourage Creativity:** Instead of just looking for certain answers in exams, evaluation methods that encourage creativity and require students to use critical thinking skills should be used. Methods such as article writing, project-based learning, research-based assignments, presentations and group work allow students to develop various skills. By developing students' abilities such as improving their thinking abilities, discovering value knowledge, associating cause-effect relationships, etc., we both increase the performance and quality of students and raise the level of education. This leads to the development of both individuals, society and the state in general.

**Use of Various Assessment Methods:** Written and multiple-choice exams cannot adequately assess students' different learning styles and skill sets. Therefore, students' true potential should be better understood and evaluated using various evaluation methods (performance evaluations, projects, portfolio evaluations).

**Evaluation Based on Exam Results Should Be Reduced:** Evaluation systems that focus on exam results direct students to focus only on exam success. Therefore, approaches based on exam results in student and school evaluations should be reduced and the student's overall performance should be evaluated more comprehensively. If possible, exams should be abolished and replaced with activities such as projects, articles, presentations, and teamwork that will be more beneficial to students.

**Strategies for Coping with Exam Stress and Psychological Effects:** The education system should include strategies that will reduce competition among students and minimize exam stress. Psychological support and guidance services can help students cope with stress and protect their mental health. More importantly, when students are no longer evaluated according to their exam results, the classroom is no longer dominated by teachers, and the classroom is no longer a prison, this will both reduce the stress of the students and eliminate the negative psychological effects.

**Learning Experiences That Increase Motivation:** To prevent students from focusing only on taking notes, learning experiences should be made more impressive and motivational. At this point, interesting course contents, up-to-date information and technology-based educational tools, opportunities for guidance and guidance according to student abilities, interactive learning environments and methods that encourage student participation are very important at this point.
Effect of Exam-Focused and Teacher-Centered Education Systems on Students' Cognitive and Psychological Competencies

Alternatives to the University Entrance System: university entrance exams may cause students to shape their learning process based on their exam performance. Alternative evaluation methods, evaluation systems that highlight personal desires and abilities and personal achievements should be applied.

Cognitive Competencies

The pressures of constant testing can lead to a narrow curriculum, aimed at test preparation rather than a holistic understanding of subjects. Research by Nichols and Berliner (2007) suggests that "teaching to the test" can limit the development of critical thinking and problem-solving skills, as students are trained to memorize and regurgitate information rather than to understand and apply knowledge.

The pressures of constant testing can indeed lead to a narrowed curriculum, aimed at test preparation rather than a holative understanding of subjects. Research by Nichols and Berliner (2007) suggests that "teaching to the test" can limit the development of critical thinking and problem-solving skills, as students are trained to memorize and regurgitate information rather than understand and apply knowledge. In the context of high-stakes standardized testing, teachers may feel compelled to focus their instruction on testable items, leading to a curriculum that is narrowed and dumbed down to the skills and knowledge that are tested (Amrein, & Berliner, 2002).

This methodology may impede the cultivation of advanced cognitive skills, including critical thinking and problem-solving, as these proficiencies often necessitate a profound comprehension of the subject matter and the capability to apply this comprehension in novel scenarios (Rear, 2019). Furthermore, the prioritization of standardized testing may lead to a narrowing of the spectrum of teaching techniques and learning encounters. Given that standardized tests typically assess discrete facts and skills that lend themselves easily to testing, educational content involving higher-order thinking and complex problem-solving is often sidelined (Jones et al., 1999). This scenario can contribute to an educational atmosphere that lacks engagement and is less conducive to the enhancement of critical thinking and problem-solving capabilities. To summarize, while high-stakes standardized testing can offer a means of ensuring accountability, it is imperative to acknowledge the potential adverse effects on student learning, particularly concerning the advancement of critical thinking and problem-solving skills. Educators, policymakers, and society as a whole need to be cognizant of these consequences and work towards striking a balance between accountability measures and the promotion of diverse, high-quality learning experiences.

Psychological Competencies

An excessive focus on test scores within educational systems has been identified as a potential source of significant psychological repercussions for students. According to Madigan, Curran, and Lonsdale (2016), the stress associated with high-stakes testing can lead to test anxiety, which negatively affects students' performance and well-being. The pressure to perform can also result in a fixed mindset, as described by Carol Dweck (2006), where students view their abilities as static and become reluctant to embrace challenges or learn from failures.
Furthermore, the pervasive pressure associated with the emphasis on test scores can lead to the adoption of a fixed mindset among students, a concept elucidated by Dweck (2006). In this context, students may start perceiving their abilities as static and unchangeable. This mindset could contribute to a reluctance to embrace challenges or learn from failures, hindering the development of resilience and adaptive learning strategies.

**A Balanced Approach**

To foster cognitive and psychological competencies fully, educators and policymakers must seek a balance between exam preparation and student-centered learning. Hattie (2009) emphasizes the importance of feedback, student self-regulation, and the development of metacognitive strategies in enhancing learning outcomes. Additionally, promoting a growth mindset by praising effort rather than innate ability can encourage resilience and a love for learning (Dweck, 2006).

**Discussion**

The examination-focused and teacher-centered education systems, as explored in this study, exhibit far-reaching consequences on students' cognitive and psychological competencies. From stifling creativity and limiting practical applications to inducing stress and narrowing curricula, the implications extend beyond individual classrooms. The system's limitations are further exacerbated by its lack of consideration for students' individual differences and diverse learning styles. This one-size-fits-all approach not only hinders personal development but also curtails the development of crucial skills required for real-world applications. The proposed solution lies in a paradigm shift towards a student-centered education model.

This approach, underscored by theorists like Vygotsky and education experts such as Weimer, emphasizes individual differences, active engagement, and the development of metacognitive strategies. Balancing teacher-centered and student-centered approaches, as highlighted by various studies, becomes pivotal in fostering a supportive and collaborative learning environment. To address the challenges posed by exam-oriented education, a holistic strategy is recommended. This involves incorporating practical applications into the curriculum, diversifying assessment methods, and reducing the undue emphasis on exam results in student and school evaluations. Strategies to mitigate stress and provide psychological support should be integral to the educational system.

**Conclusion**

The call for change extends beyond the classroom, emphasizing the need to reevaluate university entrance systems that force students into predefined paths. The discussion underscores the importance of allowing students to pursue their interests and talents, aligning higher education with their aspirations. Also, a balanced approach, combining elements of exam preparation and student-centered learning, is proposed as a solution. Strategies such as
incorporating practical applications into the curriculum, diversifying assessment methods, and reducing the undue emphasis on exam results are recommended. Furthermore, providing psychological support and mitigating stress should be integral components of the educational system.

As we traverse the intricate landscape of educational reform, it becomes imperative to acknowledge that its impact transcends individual classrooms, extending to societal and global dimensions. The ongoing discourse surrounding teacher-centered versus student-centered education underscores the necessity for continual reflection and adaptability to meet the evolving needs of learners and the challenges of an ever-changing world. Essentially, the transformation of education calls for a collaborative endeavor involving educators, policymakers, and stakeholders. By prioritizing student-centered learning, fostering creativity, and embracing a holistic approach, we can usher in an educational era that not only readies students for examinations but also equips them with the skills, resilience, and adaptability essential for navigating a future characterized by constant change and innovation.

Declaration of conflicting interest

I declare that, during this study, from any institution or business that has a direct connection with the subject of the research, a company that provides and/or produces tools, equipment and materials, or any commercial company, During the evaluation process of the study, no material or moral support was received that could negatively affect the decision to be made regarding the study. I also declare that, regarding this study, the authors and/or their family members do not have any relationships with scientific and medical committee members or members, consultancy, expertise, employment in any company, shareholding or similar situations that may have a potential conflict of interest.

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