Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Applying AlAfnan Taxonomy to English Composition Courses: Structuring Learning Outcomes for Effective Teaching

Mohammad Awad AlAfnan[1], Siti Fatimah MohdZuki[2], Shefa Mohammad AlAfnan[3]

Abstract

The article explores the significance of adopting AlAfnan's (2024a) educational taxonomy in teaching composition courses. Moving beyond the traditional focus on technical writing skills, this framework incorporates foundational knowledge, critical thinking, ethical reasoning, practical application, creativity, and adaptability. The aim is to cultivate proficient writers and holistic communicators equipped to navigate the complexities of the dynamic 21st-century landscape. The foundation of the educational taxonomy lies in acknowledging that composition courses are more than exercises in mastering mechanics; they represent a journey into ideas. By infusing foundational knowledge and comprehension, students gain a profound understanding of the subjects they engage with, ensuring clarity and coherence in their expression. Evaluation and synthesis go beyond the transmission of information to foster intellectual rigor and depth in student writing. Integrating ethical and moral reasoning into the taxonomy prompts students to consider the societal implications of their language choices, instilling a sense of responsibility in communication. Practical application and strategic thinking are deemed indispensable for effective writing. The framework prepares students for the diverse challenges of the professional world to transcend the boundaries of academic writing. Creativity and innovation are embraced to create an environment where original ideas and innovative writing approaches are encouraged and celebrated. In recognition of the rapid changes characterizing the modern era, AlAfnan's educational taxonomy incorporates lifelong learning and adaptability elements. This ensures that students view writing skills as dynamic tools requiring continuous refinement, cultivating a mindset essential for success in an ever-evolving global environment. The achievement of the learning outcomes in this study shall transform composition courses into transformative experiences that shape students into adept communicators prepared for the multifaceted demands of a rapidly evolving world.

Keywords: *Alafnan's Taxonomy, Composition Courses, Learning Outcomes, Learning Objectives, Educational Taxonomies.*

Introduction

Scholars have endeavored to create taxonomies of educational objectives to support educators in lesson planning and students' learning processes. These taxonomies serve as helpful organizational frameworks for understanding and retaining complex information, allowing educators to design diverse and practical lesson plans that cater to various needs and requirements. The traditional taxonomy of learning, established in the mid-20th century, includes cognitive, affective, and psychomotor domains. The cognitive domain, exemplified by Bloom's Taxonomy (1956), focuses on acquiring and creating knowledge. As Krathwohl et al. (1964) proposed, the affective domain explores how individuals absorb information through emotions and feelings. The psychomotor domain, developed by Harrow (1972), Simpson (1972), and Dave (1975), delves into embodied learning, movement, imitation, observation, and perception.

As education evolved, scholars like Wiggins and McTighe (2005) and Fink (2013) introduced new taxonomies that addressed learning, knowledge retention, and practical strategies. These taxonomies elevated educational standards, influencing lesson design and curriculum development across diverse settings. However, new challenges arose with the ever-changing education landscape and the emergence of digital technologies. AlAfnan (2024a) responded to these developments by presenting a comprehensive taxonomy that incorporates steps and strategies to achieve learning objectives in the face of AI and LLMs. His taxonomy comprises six categories: knowledge and understanding, application and strategic thinking, assessment and synthesis, moral and ethical reasoning, creativity and invention, and lifelong learning and adaptation.

[1] American University of the Middle East, Kuwait
[2] University Technology MARA, Shah Alam, Malaysia.
[3] International Islamic University Malaysia, Kuala Lumpur, Malaysia

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

According to AlAfnan (2024a), previous taxonomies still need to address the demands posed by AI and LLMs. Thus, the need arose for a taxonomy that caters to these technological advancements. AlAfnan & Dishari (2024a) identified general and academic purposes for students using AI. These purposes range from lack of time to lack of integrity. The needed taxonomy shall first provide a framework that includes recent developments in the educational sphere and second provide means to assist with sustainable development in the AI area (AlAfnan, et al., 2024). AlAfnan & MohdZuki, 2023; AlAfnan, 2024b) provided insights into the use of the new taxonomy in communication courses, taking intercultural communication as an example and business writing courses, taking a fundamental business writing course as an example.

The current article extends this application by providing learning outcomes for an English composition course, further emphasizing the versatility and relevance of AlAfnan's taxonomy in diverse educational contexts

Literature Review

Over the years, scholars have created several taxonomies for education objectives. Bloom's taxonomy can be the most referred to in the educational field. There are six division levels in Benjamin Bloom's objective taxonomy of teaching, which he developed in 1956 with the help of a group of researchers. These levels are knowledge, understanding, application, analysis, and systematic assessment. The pyramid model typically represents the lowest-order stages for high levels of cognitive thinking in teaching and learning. According to this taxonomy, knowledge is the lowest level of education before reaching higher stages (Nayef, 2013; Slavin, 2018). Slavin (2018) provides a clear explanation of the descriptions of these six phases. Students can interpret and apply the knowledge they are given because of their comprehension level. According to Nayef (2013), a student's ability to predict the results of an activity is a function of their degree of comprehension. The application level also shows how well students can apply their knowledge in real-world situations, such as when they utilize it to address daily difficulties. According to Slavin (2018), a higher level is an analysis stage when students can connect what they have learned by making comparisons and producing relevance. A synthesis stage is a cognitive stage that shows students' capacity to solve issues and create new things. The evaluation in which a pupil can decide in opposition to a standard or criteria on a subject is the pinnacle of Bloom's taxonomy.

Even though Bloom's taxonomy was the most referred to for more than 70 years, Bloom acknowledged the shortcomings of his taxonomy. He realized that the other five tiers of his paradigm, which dealt with intellectual capacities and skills, fundamentally differed from his "knowledge" category, including factual information, conceptual knowledge, and procedural knowledge (Wilson, 2013). Bloom was also aware that his categorization of knowledge overlooked the metacognitive knowledge category. A former Bloom student, David Krathwohl, updated the taxonomy in 2001. 'Creating' was positioned as the ultimate degree of intellect superseding 'synthesis.' This update considered improvements in both research and instructional strategies. Krathwohl established four further categories of knowledge: factual, procedural, conceptual, and metacognitive. A subject's core is its factual information; procedural knowledge deals with carrying out tasks; conceptual knowledge relates to the links between components; and metacognitive knowledge deals with knowledge about cognition.

The number of objects and processes in Bloom's taxonomy that are more specific and identifiable than those in other taxonomies is its actual advantage (Radmehr & Drake, 2020). However, there are occasionally minor variations in the SOLO taxonomy proposed by Biggs and Collis (1982). Surface learning and deep learning are the two primary divisions of the SOLO taxonomy (Brown, 2004; Caniglia & Meadows, 2018). As per reference (Eng & Ramiah, 2013), learning at the surface level comprises facts, information, and scope components and coverage. Students must be able to offer meaning, think critically, understand life's purpose, and reflect to engage in deep learning. Chan et al. (2002) say that the five components comprising the two primary divisions of the SOLO taxonomy are pre-structural, uni-structural, multi-structural, relational, and extended abstract. Though less well-known than Bloom's (1956), Anderson, and Wilson's (2001) taxonomies, the SOLO taxonomy offers a comprehensive understanding of the presence of a

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

fundamental aspect of learning. The benefits of deep learning extend beyond its capacity to facilitate analysis, synthesis, and assessment; it may also reveal the true significance and intent of learning.

In addition to the previously reviewed taxonomies, the Taxonomy of Significant Learning developed by Fink (2003, 2013) is a widely used substitute for Bloom's taxonomy. Fink's taxonomies are nonhierarchical in contrast to Bloom's original and updated taxonomies, and each component works with the others to support various learning modalities (Fink, 2003). Fink also incorporates terms from Bloom's "affective" taxonomy, such as "caring" and "the human dimension." Like the updated Bloom's taxonomy, Fink emphasizes metacognition's role in education. Fink recognized six dimensions: caring, which is acquiring new emotions, passions, and ideals; learning how to learn, which is developing into a lifelong, self-directed learner; and the human dimension, which is discovering more about oneself and others.

In 2024, AlAfnan presented his educational taxonomy to address the challenges and the new developments in education. AlAfnan's (2024a) taxonomy comprises six categories that are: (1) knowledge and comprehension; (2) application and strategic thinking; (3) evaluation and synthesis; (4) moral and ethical reasoning; (5) creativity and innovation; and (6) lifelong learning and adaptability (refer to Figure 1). Level 1 combines knowledge and comprehension, realizing that remembering is followed by understanding. AlAfnan (2024a) strongly emphasizes a student-centered approach in which students engage in active learning via workshops, brainstorming sessions, and debates (AlAfnan & Dishari, 2024).

Figure 1. AlAfnan's Taxonomy (Adapted from AlAfnan, 2024a)

AlAfnan (2024a) combined evaluation and synthesis in the second level. This combination provides a more comprehensive view of information processing and analysis, recognizing the intimate relationship between these activities in practical settings. Learners frequently engage in synthesis in parallel with information assessment to create a full understanding. The iterative nature of learning and decision-making (Jonassen, 2012) is reflected in this integration. In actuality, assessment is influenced by synthesis, and reevaluation is influenced by evaluation. The taxonomy highlights the interdependence of assessment (Sebok-Syer, et al., 2018) and information synthesis by merging both processes, encouraging a more complex and integrated approach to knowledge acquisition and problem-solving.

AlAfnan (2024a) added the 'Ethical and Moral Reasoning' categories as the third category and 'Application and Strategic Thinking' as the fourth category. This addendum broadens the learning span beyond understanding and analysis. After evaluating and synthesizing the content, applying information and using strategic thinking makes sense for learners. 'Application' refers to applying synthesized information to problems, choices, or creative real-world solutions. In the meantime, 'Strategic Thinking' pushes limits by

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

assisting students in thinking outside the box, projecting the future, and creating long-term goals. This progression highlights the value of strategic planning and foresight in the decision-making and problem-solving processes (Gok, 2010) and the practical implementations of learned information. The sequence in which "Ethical and Moral Reasoning" and "Application and Strategic Thinking" are presented emphasizes how crucial ethical issues are to learning and productivity. 'Ethical and moral reasoning' is the basis of practical applications and strategic planning. It influences students' ethical framework, directs their actions, and informs their strategic thinking (AlAfnan, 2024a).

AlAfnan's taxonomy concludes with two categories: 'Creativity and Innovation' (level 5) and 'Lifelong Learning and Adaptability' (level 6). Creativity and innovation are essential in today's dynamic environment because they promote critical thinking, problem-solving, and idea production. Teachers foster creativity and innovation in their students, preparing them for careers prioritizing adaptability and innovative thinking. Furthermore, lifelong learning is essential in a culture of constantly changing knowledge and technology. "Lifelong Learning and Adaptability" emphasizes the need for ongoing education and keeping up with emerging trends. In order to prepare students for long-term success in various subjects, it emphasizes the significance of teaching (Barnes, 2004) them how to learn, unlearn, and relearn. In today's world, it is essential to be adaptable and creative to comprehend and value the various cultures and viewpoints. These skills let students interact and communicate effectively with people from other cultures and nations. "Lifelong Learning and Adaptability" and "Creativity and Innovation" are two prime examples of the modern educational strategy that empowers students to develop into well-rounded, creative, and flexible graduates, readying them for the difficulties of the workforce of the future. These abilities support professional achievement, personal growth, and positive social influence (AlAfnan, 2024a).

This study uses AlAfnan's (2024a) taxonomy to create learning outcomes for a composition course. Composition courses are taught in universities to impart writing and critical thinking abilities that are applicable inside and outside the classroom. They require a wide range of genres and styles, as well as a diversity of approaches and target audiences.

Teaching Composition Courses

Whatever students' direction, composition is a vital writing ability that will serve students well in universities and beyond. To help readers comprehend a concept or argument, a composition arranges several ideas in a logical sequence. Students will learn to compose or combine various components to write clearly. Students learn to write for a specific audience in as few words as feasible while maintaining logic and persuasiveness. They also discover how to structure their writing to make it read naturally. In composition courses, students develop communication, writing, research, and rhetoric skills.

Communicating intelligibly, succinctly, and accurately is a life skill. This is a talent that composition class is meant to help students acquire to excel in their chosen field of work (Nelms & Dively, 2007). Students discover how to effectively communicate with a target audience by using compelling, captivating, and appealing language (Aull, 2023). Students learn how to employ informative, inspirational, and persuading strategies to get readers to agree with the content of their write-up or perform the action they are urging. Additionally, students learn how to foresee the arguments and counterarguments the audience may have and skillfully and succinctly respond to them (Yaacoub, 2023). Students learn to digest the material in any format, analyze it critically, and effectively express their ideas and findings through language. These composition classes also teach them to convince an audience through ethical, logical, and emotive language.

Writing is expected in numerous professions. Students may improve their writing abilities, which are essential for clear communication. As they go deeper into their degree topic, they will need to be able to articulate complicated thoughts and analytical concepts in writing, as well as understand and apply industry-specific jargon (Goodwin, 2024). Students need to improve their writing abilities to communicate at higher levels effectively. As they learn writing, they also learn that their sources should be reputable and diverse because they create more intricate and polished analytical material. Students need to refine their research techniques as they create increasingly complex articles. A significant part of undergraduate composition courses is learning to locate suitable materials, use them appropriately, and formulate and present their

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

ideas. Employers greatly emphasize research skills as they demonstrate attention to detail, time management, and problem-solving skills.

The composition course supported in this article covers seven main topics/chapters. The seven chapters are (1) Exploring the Writing Process, (2) Illustration Essays, (3) Summarizing, Quoting and Avoiding Plagiarism, (4) Process Essays, (5) Strengthening an Essay with Research, (6) Classification Essays, and (7) Persuasive Essays. The chapters are mainly supported by Fawcett's (2018) textbook Evergreen-A Guide to Writing with Readings (11th edition). In this article, the teaching of the composition course is outlined based on AlAfnan's (2024a) taxonomy.

The Composition Course: Learning Outcomes Based on AlAfnan's Taxonomy

According to AlAfnan (2024), the taxonomy is essential as it makes it easier to integrate new issues into the curriculum, keep traditional classrooms as the designated learning environments, and maintain teachers' roles as facilitators who support students in developing their critical thinking and practical skills (Rademaekers, 2023). With the emergence of AI, it became almost instantly more accessible for students to generate general writeups and academic essays. Students do not need to write their essays as they have an alternative that creates original essays free from plagiarism and human-like style. The challenge for composition courses in this era is huge as students need to realize the importance of these courses, on the one hand, and learn the strategies and techniques to develop composition and academic writing skills, on the other hand. AlAfnan's taxonomy will delineate the learning objectives for these chapters to accomplish these aims.

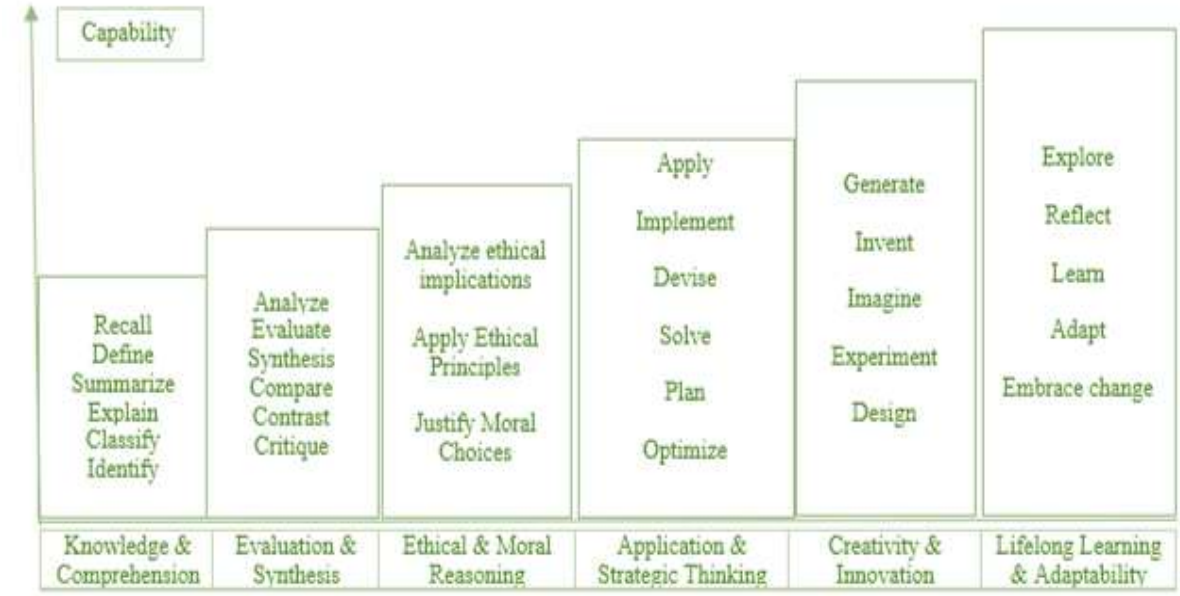

Figure 2. Alafnan's Taxonomy with Action Verbs (Adopted from Alafnan (2024a))

As seen in Figure 2, the taxonomy is divided into six categories: knowledge and comprehension, evaluation and synthesis, ethical and moral considerations, application and strategic thinking, creativity and innovation, and lifelong learning and adaptability. These six categories form the basis for the presentation of the learning outcomes.

Knowledge and Comprehension

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Incorporating knowledge and comprehension into the taxonomy for teaching composition is fundamental to fostering a comprehensive and structured approach to writing education. Knowledge at the base of AlAfnan's Taxonomy encapsulates the recall and understanding of foundational facts, rules, and concepts essential for effective writing. This encompasses grammatical rules, vocabulary acquisition, and an awareness of various writing structures. Without this foundational knowledge, students may struggle to articulate coherent and meaningful written expressions. Comprehension (Gulo, et al., 2023) involves the ability to interpret, summarize, and explain information. Composition requires students to grasp the meaning of texts, discern the main ideas, and comprehend the nuances of different writing styles. This level of understanding is pivotal for students as they progress in their writing journey, allowing them to navigate complex literary landscapes and make informed choices in their compositions.

Below are the knowledge and comprehension learning outcomes for the seven topics discussed in the composition course.

Table 1. Knowledge and Comprehension learning outcomes based on AlAfnan's Taxonomy

Topic	**Learning Outcomes**
Exploring the Writing Process	- Identify and explain key elements of effective writing, including but not limited to thesis statements, topic sentences, supporting details, and conclusions. - Comprehend the stages of the writing process, from prewriting and drafting to revising, editing, and publishing, and recognize the importance of each stage in producing polished and compelling compositions.
Illustration Essays	- Define the concept of an illustration essay and identify its key characteristics, such as using specific examples to support a thesis or point. - Comprehend the primary purpose of an illustration essay, which is to clarify, explain, and support a general statement with concrete examples.
Summarizing, Quoting, and Avoiding Plagiarism	- Define and differentiate between summarizing (concisely conveying the main ideas of a text in one's own words) and quoting (using the exact words from a source). - Define plagiarism, including its various forms (e.g., direct copying, paraphrasing without proper attribution).
Process Essays	- Define what a process essay is and identify its key characteristics, including its focus on explaining a series of steps to achieve a particular outcome or result. - Acquire knowledge of appropriate transition words and phrases to facilitate the smooth flow of ideas and steps within the process essay.
Strengthening an Essay with Research	- Define and understand the fundamental research concepts, including how to locate, evaluate, and select reliable sources. - Identify and differentiate between sources, such as scholarly articles, books, websites, and primary sources.
Classification Essays	- Define what a classification essay is and identify its key characteristics, including the organization of information into categories based on shared characteristics. - Comprehend the importance of considering the audience and purpose when writing classification essays, tailoring the content and approach to categorize and communicate information effectively.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Persuasive Essays	- Define what a persuasive essay is and identify its key characteristics, including the presentation of arguments to persuade the audience to adopt a particular viewpoint or take a specific action. - Acquire knowledge of rhetorical devices such as ethos, pathos, and logos and understand how to strategically use them to enhance the persuasive impact of the essay.

These lower levels of the taxonomy serve as a scaffolding mechanism, providing students with the necessary tools to ascend to higher-order thinking skills. Including knowledge and comprehension in the taxonomy also facilitates assessing students' foundational understanding and allows educators to provide targeted feedback. This iterative process is crucial for guiding students toward more excellent proficiency in composition. In essence, knowledge and comprehension serve as the bedrock upon which the edifice of advanced writing skills is constructed, ensuring a holistic and developmental trajectory in the teaching of composition.

Evaluation and Synthesis

Including evaluation and synthesis in a taxonomy for teaching, composition is vital for fostering critical thinking skills and guiding students toward a more nuanced and sophisticated approach to writing. Evaluation (Balqis & Andriani, 2024) requires students to critically assess and judge information's effectiveness, validity, and relevance. This skill prompts students to go beyond merely understanding and applying concepts in composition. Instead, they must analyze the quality of arguments, the credibility of sources, and the overall persuasiveness of a piece of writing. This evaluative capacity empowers students to discern between strong and weak arguments, enabling them to make informed choices in their writing and engage more critically with the diverse perspectives they encounter. Synthesis involves combining and integrating various sources, ideas, or perspectives into a coherent and unified whole. In composition, synthesis goes beyond basic comprehension and application; students must synthesize information from multiple sources to develop original insights, perspectives, or arguments. This skill encourages students to see connections between disparate elements, fostering a more holistic understanding of complex issues and allowing them to contribute meaningfully to ongoing conversations within their field of study.

Table 2 provides the learning outcomes of the second category in AlAfnan's taxonomy for the composition course.

Table 2. Evaluation And Synthesis Learning Outcomes Based on Alafnan's Taxonomy

Topic	**Learning Outcomes**
Exploring the Writing Process	- Evaluate the strength of arguments presented in written texts, considering factors such as evidence quality, logical reasoning, and the effectiveness of rhetorical strategies. - Develop the capacity to assess the effectiveness of different writing styles, structures, and techniques, enabling them to make informed choices in their compositions.
Illustration Essays	- Develop the ability to critically appraise and evaluate the relevance, effectiveness, and clarity of examples presented in illustration essays. - Demonstrate the skill of harmonizing various illustrative elements, ensuring that examples work together seamlessly to support the central theme of the illustration essay.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Summarizing, Quoting, and Avoiding Plagiarism	- Synthesize information to create a unified and coherent writing, integrating summaries and quotations into their narrative or argument. - Assess the effectiveness of their paraphrasing, ensuring that the rephrased content accurately represents the original meaning while maintaining clarity and coherence.
Process Essays	- Develop the ability to assess and evaluate the clarity, precision, and effectiveness of each step presented in process essays, ensuring that the instructions are comprehensible and logically organized. - Synthesize information to create a unified and coherent explanation of a process, ensuring that each step is seamlessly integrated into the overall narrative.
Strengthening an Essay with Research	- Demonstrate the ability to assess the credibility and reliability of sources, distinguishing between reputable and unreliable information and integrating trustworthy sources into their writing. - Synthesize information from multiple sources, effectively integrating diverse perspectives to create a unified and coherent narrative in their writing.
Classification Essays	- Develop the ability to assess and evaluate the relevance and appropriateness of categories presented in classification essays, ensuring that each category is distinct and serves the essay's purpose. - Synthesize information to create a unified and coherent classification system, ensuring that each category is integrated into the narrative.
Persuasive Essays	- Develop the ability to analyze and evaluate the strength, validity, and relevance of arguments presented in persuasive essays, considering factors such as evidence quality, logical reasoning, and rhetorical strategies. - Synthesize information from various sources to create a persuasive essay, effectively integrating diverse perspectives and persuasive elements to support their arguments.

As shown in Table 2, educators promote depth and complexity in students' writing abilities by incorporating evaluation and synthesis into a taxonomy for teaching composition. These skills enhance the quality of individual compositions and prepare students to navigate the intricacies of academic, professional, and real-world discourse. Through evaluation, students become discerning critics, and through synthesis, they become contributors to the ongoing dialogue, adding depth and sophistication to their compositions and allowing them to engage more effectively with the broader intellectual community.

Ethical and Moral Reasoning

Including ethical and moral reasoning in a taxonomy for teaching composition is crucial as it enhances the depth, responsibility, and societal impact of students' writing. By integrating ethical and moral reasoning into the teaching of composition, educators ensure that students become proficient writers and responsible communicators who consider the ethical implications of their words. Ethical reasoning (Guan, et al., 2023) in composition emphasizes the importance of honesty, integrity, and accountability in written communication. Students learn to navigate the complex landscape of information dissemination with a commitment to truthfulness, citing sources accurately, and avoiding plagiarism. They understand the ethical responsibilities associated with presenting information, recognizing the potential consequences of

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

misinformation, and striving for transparency in their writing. Moral reasoning goes beyond ethical guidelines, encouraging students to reflect on the broader societal impact of their writing. It prompts them to consider the potential effects of their words on diverse audiences, fostering empathy and cultural sensitivity. By integrating moral reasoning, students develop an awareness of social justice issues, recognizing their role in promoting inclusivity, challenging biases, and advocating for positive change through their writing.

Table three provides the learning outcomes for the composition course based on the third category in AlAfnan's taxonomy.

Table 3. Ethical and Moral Reasoning Learning Outcomes based on AlAfnan's Taxonomy

Topic	**Learning Outcomes**
Exploring the Writing Process	- Maintain transparency in their revisions, clearly indicating changes made to their work and avoiding deceptive practices that compromise the integrity of the writing process. - Prioritize cultural sensitivity in the brainstorming phase, avoiding stereotypes and embracing a diversity of voices and experiences.
Illustration Essays	- Demonstrate ethical reasoning by consistently attributing and crediting sources of examples in their illustrative essays, maintaining the integrity of the information presented. - Promote positive values through their illustrative essays, contributing to a narrative that fosters understanding, empathy, and positive social change.
Summarizing, Quoting, and Avoiding Plagiarism	- Demonstrate ethical reasoning by consistently and accurately attributing sources in their summaries and quotations, maintaining the integrity of their work, and giving proper credit to original creators. - Take responsibility for avoiding plagiarism, recognizing that plagiarism undermines the principles of fairness and honesty in academic and professional writing.
Process Essays	- Demonstrate ethical reasoning by consistently attributing sources throughout process essays, maintaining the integrity of information presented, and giving proper credit to the original creators. - Advocate for inclusivity in their process essays, considering diverse perspectives and ensuring their work represents diverse experiences and voices.
Strengthening an Essay with Research	- Prioritize transparency in integrating research into their essays, clearly distinguishing between their ideas and those derived from external sources, avoiding any potential for misrepresentation. - Apply moral reasoning by maintaining cultural awareness in their research, ensuring that their essays contribute to a respectful and inclusive discourse considering cultural variations and diverse perspectives.
Classification Essays	- Demonstrate ethical reasoning by consistently and accurately attributing sources in their classification essays, maintaining the integrity of the information presented, and giving proper credit to the original creators. - Actively promote positive values in their classification essays, contributing to a narrative that fosters understanding, respect, and positive interactions among diverse entities.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Persuasive Essays	- Demonstrate the ability to uphold ethical standards by consistently and accurately citing sources and giving proper credit to the original creators of ideas or information used in persuasive essays. - Demonstrate empathy in their persuasive essays understanding the impact of their words on different individuals and communities and striving for inclusive and compassionate language.

As Table 3 shows, integrating ethical and moral reasoning into the teaching of composition instills in students a sense of responsibility for the impact of their words on individuals and society. This holistic approach to writing education goes beyond technical proficiency, empowering students to be ethical communicators who contribute positively to the broader ethical and moral fabric of the communities they engage with through their writing.

Application and Strategic Thinking

Incorporating application and strategic thinking into a taxonomy for teaching composition is essential for cultivating students' ability to transfer their writing skills to real-world contexts and strategically engage with various rhetorical situations. Writing, at its core, is not a static skill confined to academic exercises; instead, it is a dynamic and adaptive tool used in many professional, personal, and civic settings. Application (Lazaro & Duart, 2023) in the context of composition involves practically implementing writing skills in diverse scenarios. By including application in the taxonomy, educators encourage students to connect theoretical concepts learned in the classroom to real-world situations. This equips them to effectively communicate in professional environments, respond to the demands of different genres and audiences, and navigate the complexities of various rhetorical contexts. Strategic thinking, on the other hand, introduces a higher level of cognitive engagement in the writing process. It encompasses the deliberate planning, decision-making, and problem-solving writers undertake to achieve their communicative goals. Strategic thinking encourages students to consider purpose, audience, and context critically. It involves making informed choices about tone, style, and organization to maximize the impact of their writing. This skill is precious in preparing students for the multifaceted nature of communication in the real world.

Table four provides the learning outcomes of the composition course based on the fourth category in AlAfnan's taxonomy.

Table 4. Application and Strategic Thinking Outcomes based on AlAfnan's Taxonomy

Topic	**Learning Outcomes**
Exploring the Writing Process	- Apply the writing process to real-world scenarios, recognizing the relevance of the writing process in professional, academic, and personal communication. - Engage in strategic thinking by reflecting on their writing processes, identifying strengths and areas for improvement, and strategically implementing changes to enhance their writing skills continuously.
Illustration Essays	- Apply illustration techniques to real-world scenarios, recognizing opportunities to use vivid examples and anecdotes effectively in professional, academic, or personal communication. - Showcase strategic thinking by synthesizing diverse examples within their illustration essays, demonstrating a nuanced understanding of the topic, and presenting a comprehensive and compelling narrative.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Summarizing, Quoting, and Avoiding Plagiarism	- Strategically use quotations to emphasize critical points in their writing, recognizing opportunities to enhance their message through the judicious use of direct quotes. - Strategically avoid plagiarism by recognizing the contextual nuances of different writing situations and applying appropriate citation practices.
Process Essays	- Demonstrate the ability to apply the conventions of process essays across different genres, adapting their writing strategies to suit various contexts and audiences. - Develop effective sequencing strategies by strategically arranging steps or stages to enhance clarity and coherence in their essays.
Strengthening an Essay with Research	- Apply research skills to real-world scenarios, recognizing opportunities to enhance their writing with credible sources in professional, academic, or research-based communication. - Develop the ability to strategically select and evaluate sources, ensuring that the chosen materials enhance the credibility and persuasiveness of their essays.
Classification Essays	- Demonstrate the ability to adapt their classification essays to different genres, recognizing and applying the conventions and expectations of various writing contexts. - Demonstrate strategic thinking by purposefully selecting and organizing categories in their classification essays to achieve specific rhetorical purposes.
Persuasive Essays	- Demonstrate the ability to apply the conventions of persuasive essays across different genres, adapting their writing strategies to suit various contexts and audiences. - Demonstrate strategic thinking by identifying potential weaknesses or gaps in their arguments and strategically addressing them through additional research, counterarguments, or nuanced perspectives.

Table 4 shows that the inclusion of application and strategic thinking in the taxonomy for teaching composition bridges the gap between theoretical knowledge and practical proficiency. It prepares students to be versatile and strategic communicators, capable of navigating the complexities of real-world writing scenarios with adaptability, foresight, and effectiveness. This holistic approach to teaching composition ensures that students develop as skilled writers and strategic thinkers equipped for success in diverse communicative contexts.

Creativity and Innovation

Including creativity and innovation in the taxonomy for teaching, composition is vital to nurturing students as dynamic and adaptable communicators in an ever-evolving world. Creativity (Hickman, 2023) in composition allows students to transcend the boundaries of conventional expression. It encourages them to explore unique perspectives, experiment with diverse writing styles, and infuse their work with imaginative elements that captivate and engage readers. By fostering creativity, educators empower students to move beyond the rote application of writing rules, encouraging them to explore their voices and develop a sense of ownership over their writing. Innovative composition prepares students for the demands of a rapidly changing information landscape. Innovative thinking equips students to adapt their writing to various contexts in an era where communication platforms and mediums constantly evolve. It encourages them to experiment with new technologies, multimedia elements (AlAfnan, 2025a), and emerging forms of digital communication, ensuring that their writing remains relevant and impactful in contemporary society. Incorporating creativity and innovation into the taxonomy also cultivates critical thinking skills. Students

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

learn to question existing norms, challenge assumptions, and explore unconventional solutions to communicative challenges. This enhances their ability to express ideas creatively and fosters a mindset of curiosity and exploration that extends beyond the realm of writing.

Table 5 provides the composition course's learning outcomes based on the fifth category in AlAfnan's taxonomy.

Table 5: Creativity and Innovation Outcomes based on AlAfnan's Taxonomy

Topic	Learning Outcomes
Exploring the Writing Process	- Develop creative pre-writing techniques, exploring innovative brainstorming methods, mind mapping, or other approaches to generate unique and original ideas before initiating the writing process. - Embrace innovation by adopting new writing technologies or tools, exploring digital platforms, collaborative writing software, or other innovations that enhance the writing process and collaboration.
Illustration Essays	- Demonstrate creativity by selecting unique and innovative topics for their illustrative essays, exploring areas that engage readers and provide fresh perspectives on familiar subjects. - Embrace innovation by integrating multimedia elements into illustrative essays, such as incorporating images, videos, or interactive elements to enhance the visual and experiential aspects of the narrative.
Summarizing, Quoting, and Avoiding Plagiarism	- Develop creative summarization techniques exploring innovative ways to condense information while maintaining clarity and preserving the essence of the original content. - Cultivate an innovative approach to summarizing, quoting, and avoiding plagiarism by experimenting with digital tools and technologies that assist in these processes, fostering efficiency and accuracy.
Process Essays	- Creatively plan and sequence the steps of a process essay, experimenting with imaginative approaches to organize and present the information engagingly and compellingly. - Develop forward-thinking strategies to engage readers proactively, exploring innovative ways to prompt reflection, encourage discussion, or elicit a response from the audience through their process essays.
Strengthening an Essay with Research	- Develop the ability to creatively construct arguments by integrating research in innovative ways, exploring unconventional angles and viewpoints to make their essays more compelling. - Adopt innovative research practices, exploring and incorporating emerging sources, cutting-edge studies, or unconventional data sets to bring a fresh and forward-thinking perspective to their essays.
Classification Essays	- Cultivate a creative approach to the classification process by exploring various methods such as analogies, metaphors, or storytelling techniques to make the classification more dynamic and captivating for the reader.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

	- Develop forward-thinking strategies to engage readers proactively, exploring innovative ways to prompt reflection, encourage discussion, or elicit a response from the audience through their classification essays.
Persuasive Essays	- Develop persuasive arguments by experimenting with novel approaches and employing inventive reasoning strategies to enhance the originality and impact of the essay. - Develop forward-thinking strategies to engage readers proactively, exploring innovative ways to prompt reflection, encourage discussion, or elicit a response from the audience through their persuasive essays.

As Table 5 shows, including creativity and innovation in the taxonomy for teaching composition transforms writing instruction from a static set of rules to a dynamic and enriching process. It not only enhances the quality of written expression but also prepares students to navigate the complexities of communication in a world that increasingly values creative thinking and innovative approaches to problem-solving.

Lifelong Learning and Adaptability

Incorporating lifelong learning and adaptability into the taxonomy for teaching composition is essential to equip students with skills that transcend specific writing tasks and endure throughout their academic and professional journeys. Lifelong learning encourages students to view writing as an ongoing developmental process rather than a series of isolated tasks. By fostering a mindset of perpetual learning, students are more likely to engage in self-directed exploration, seeking to expand their writing skills beyond the confines of a particular assignment. This approach instills a love for continuous improvement, motivating students to embrace new writing styles, genres, and techniques throughout their academic and professional careers. Adaptability in composition is crucial as it prepares students to navigate the ever-changing landscape of communication. As technology advances and societal needs evolve, writing conventions and communication platforms also transform. Teaching adaptability (Xu, et al., 2023) ensures students seamlessly transition between traditional and digital writing contexts, adapting their skills to diverse audiences, genres, and mediums. Lifelong learning and adaptability in composition foster critical thinking. Students learn to evaluate new information, assess the evolving needs of different audiences, and make informed decisions about how to express ideas effectively. This enhances their writing proficiency and nurtures a broader set of cognitive skills valuable in various academic disciplines and professional settings.

Table 6. Lifelong Learning and Adaptability Outcomes based on AlAfnan's Taxonomy

Topic	**Learning Outcomes**
Exploring the Writing Process	- Cultivate a commitment to lifelong learning by continuously exploring and experimenting with diverse writing strategies. - Adjust their language, tone, and style to suit the understanding and preferences of varied readership.
Illustration Essays	- Cultivate a commitment to lifelong learning by continuously exploring and experimenting with diverse illustrative mediums. - Adapt their illustrative approaches to incorporate emerging artistic methods or visual storytelling techniques that enhance the impact of their illustration essays.
Summarizing, Quoting, and Avoiding Plagiarism	- Engage with and adopt evolving quoting and summarizing practices. - Adjust their use of quotations to suit the understanding and preferences of varied readership.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Process Essays	- Cultivate a commitment to lifelong learning by continuously exploring and refining details related to various processes. - Adapt their descriptions based on the context, audience, and purpose, recognizing the need for tailored explanations in different communication situations.
Strengthening an Essay with Research	- Cultivate a commitment to lifelong learning by continuously exploring and refining research methodologies. - Adapt their research strategies, incorporating new insights or adjusting their approaches to emerging data or evolving perspectives on the essay topic.
Classification Essays	- Engage with and adopt evolving classification methods. - Adapt classification approaches based on the context, audience, and purpose, recognizing the need for tailored categorization in different communication situations.
Persuasive Essays	- Cultivate a commitment to lifelong learning by continuously exploring and adopting new persuasive techniques. - Adapt their persuasive approaches based on the needs and preferences of different audiences, recognizing that one size does not fit all in persuasive communication.

As Table 6 shows, by including lifelong learning and adaptability in the taxonomy for teaching composition, educators acknowledge that the skills students acquire extend far beyond the classroom. Embracing lifelong learning and adaptability in composition education prepares students for the challenges of today and the uncertainties and opportunities they will encounter in their future academic and professional pursuits. This comprehensive approach ensures that students develop as skilled writers and lifelong learners capable of navigating the complexities of a dynamic and ever-changing communication landscape.

Discussion

AlAfnan's taxonomy is proposed to address the latest educational challenges and ensure that classrooms remain and maintain their status as the formal ground for learning. Students have a wide variety of learning options, and AI is one of them (AlAfnan, 2025b). Even though AI provides human-like text and numerical input, it lacks depth. It does not provide users with comprehensive insights into topics. Additionally, as learning is not only about grasping concepts in terms of knowledge and comprehension, the teacher's role remains unchanged. However, this does not mean teachers can continue their standard practices as before these recent developments.

Changes in teaching shall include strategies, methods (Dishari & AlAfnan, 2023), techniques, and the frameworks/taxonomies used in teaching. The existing taxonomies focus mainly on learning concepts, evaluating input, and producing material based on the given knowledge. Even though this is important in teaching, learning needs to focus on ethical reasoning, moral reasoning, lifelong learning, and adaptability. This is the education case, as education goals shall include sustainability and soft skills development. These new needs are presented and addressed in AlAfnan's (2024a) taxonomy, adopted in this study to provide learning outcomes for a composition course.

The integration of AlAfnan's (2024a) educational taxonomy that encapsulates knowledge and comprehension, evaluation and synthesis, ethical and moral reasoning, application and strategic thinking, creativity, and innovation, as well as lifelong learning and adaptability, is a strategic imperative in the context of teaching composition courses. This comprehensive framework extends beyond the conventional focus on technical writing skills, aiming to shape students into holistic communicators equipped to navigate the multifaceted demands of the 21st century. Composition courses, at their core, are not mere exercises in stringing words together. They represent a journey into ideas and concepts. By infusing foundational

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

knowledge and comprehension into the educational taxonomy, students are not only mastering the mechanics of writing. Still, they also cultivate a profound understanding of the subjects they engage with. This depth of knowledge lays the groundwork for effective communication by ensuring clarity and coherence in expression.

Effective writing transcends the mere transmission of information; it involves critically evaluating and synthesizing diverse perspectives. Including evaluation and synthesis in the educational taxonomy propels students beyond the confines of rote learning. It nurtures their ability to analyze information critically, discern credible sources, and synthesize complex ideas. This transformative approach elevates their writing beyond a mechanical process, fostering intellectual rigor and depth. Words possess a profound and lasting impact. Considering the potency of language, ethical and moral reasoning is integral to the composition. By incorporating ethical dimensions into the educational taxonomy, students are prompted to consider the societal implications of their language choices. This goes beyond the technicalities of grammar and style, instilling a sense of responsibility in communication. The result is not just articulate expression but communication that is ethically mindful.

Writing, as a practical tool, extends beyond the confines of academia. Application and strategic thinking are indispensable facets of effective writing. Integrating these elements into the educational taxonomy empowers students to apply their writing skills across diverse contexts. This is coupled with strategic thinking, preparing them for the multifaceted demands of the professional world. It transcends the academic realm, equipping students to navigate practical challenges in various real-world scenarios. As writing is not a mechanical exercise but a creative endeavor, infusing creativity and innovation into the educational taxonomy transforms composition courses into dynamic and vibrant spaces. Beyond mastering rules and structures, students are encouraged to explore beyond conventional boundaries. This fosters an environment where original ideas and innovative writing approaches are welcomed and celebrated. It nurtures a culture of creativity crucial in a world where communication is increasingly diverse and dynamic.

In an era characterized by rapid change, the ability to learn continuously and adapt is paramount. Including lifelong learning and adaptability in the educational taxonomy ensures that students do not perceive writing skills as static but as dynamic tools requiring continuous refinement. This element prepares them for the evolving landscape of communication technologies and changing language norms. It cultivates a mindset of continuous improvement and adaptability, essential for success in a dynamic global environment.

Establishing learning outcomes for the composition course based on AlAfnan's educational taxonomy is the cornerstone for effective communication in the 21st century. It transforms composition courses into more than exercises in technical proficiency. Instead, these courses become transformative experiences that shape students into adept communicators capable of navigating the complexities of a rapidly evolving global landscape. Integrating knowledge, critical thinking, ethical considerations, practical application, creativity, and adaptability forms a holistic approach essential for preparing students for academic success and success in the broader landscape of life and work.

Conclusion

Adopting a comprehensive educational taxonomy is essential when teaching composition courses. AlAfnan's framework includes foundational knowledge, evaluation and synthesis, ethical reasoning, application and strategic thinking, creativity and innovation, and lifelong learning. Beyond focusing solely on technical writing skills, this approach aims to cultivate holistic communicators capable of navigating the dynamic demands of the 21st century.

Composition courses are not just about mastering mechanics; they represent a journey into ideas. Foundational knowledge and comprehension in the educational taxonomy ensure students understand and

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

articulate subjects coherently. Beyond the transmission of information, effective writing involves critical evaluation and synthesis. This transformative approach fosters intellectual rigor and depth, moving beyond rote learning. Ethical and moral reasoning is integral to language's potent impact. By incorporating ethical dimensions into the taxonomy, students consider the societal implications of their language choices, instilling a sense of responsibility in communication. Application and strategic thinking are indispensable for practical writing. This prepares students for diverse real-world scenarios, transcending the academic realm. Creativity and innovation infuse vibrancy into composition courses, encouraging exploration beyond conventional boundaries. Original ideas and innovative approaches to writing are not only welcomed but celebrated.

In an era of rapid change, lifelong learning and adaptability are paramount. Including these elements ensures that students view writing skills as dynamic tools requiring continuous refinement. This mindset cultivates adaptability, essential for success in a dynamic global environment. AlAfnan's educational taxonomy forms the cornerstone for effective communication. It transforms composition courses into transformative experiences, shaping students into adept communicators prepared for the complexities of a rapidly evolving world. Integrating knowledge, critical thinking, ethics, practical application, creativity, and adaptability prepares students for academic success and success in life and work.

References

AlAfnan, M. A. (2025a). Cultural and Behavioral Insights into European Social Media Users: Platform Preferences and Personality Types. Studies in Media and Communication, 13(1).

AlAfnan, M. A. (2025b). Artificial Intelligence and Language: Bridging Arabic and English with Technology. Journal of Ecohumanism, 4(1), 240-256.

AlAfnan, M. A. (2024a). Taxonomy of educational objectives: Teaching, learning, and assessing in the information and artificial intelligence era. Journal of Curriculum and Teaching, 13(4)173-191.

AlAfnan, M. A. (2024b). Large Language Models as Computational Linguistics Tools: A Comparative Analysis of ChatGPT and Google Machine Translations. Journal of Artificial Intelligence and Technology. https://doi.org/10.37965/jait.2024.0549

AlAfnan, M. A., & Dishari, S. (2024). ESD goals and soft skills competencies through constructivist approaches to teaching: an integrative review. Journal of Education and Learning (EduLearn), 18(3), 708-718.

AlAfnan, M. A., & MohdZuki, S. F. (2023). Do artificial intelligence chatbots have a writing style? An investigation into the stylistic features of ChatGPT-4. Journal of Artificial intelligence and technology, 3(3), 85-94.

AlAfnan, M. A., Dishari, S., & Siti Fatimah MohdZuki. (2024). Developing Soft Skills in the Artificial Intelligence Era: Communication, Business Writing, and Composition Skills. Journal of Artificial Intelligence and Technology. Retrieved from: https://doi.org/10.37965/jait.2024.0496

Anderson, W., & Wilson, O. (2001). The Royal Tenenbaums. Macmillan.

Aull, L. (2023, March). Attention to language in composition. In Composition forum (Vol. 51). Association of Teachers of Advanced Composition.

Balqis, A. S., & Andriani, A. E. (2024). Development of Learning Evaluation Based on Automatic Assessment through Quizizz Paper Mode to Improve Students' Natural and Social Sciences Learning Outcomes. Jurnal Penelitian Pendidikan IPA, 10(6), 3357-3366.

Barnes, D. (2004). The significance of teachers' frames for teaching. In Teachers and teaching (pp. 16-38). Routledge.

Biggs, J. B. & Collis, K. (1982). Evaluating the Quality of Learning: the SOLO taxonomy. New York, NY: Academic Press.

Bloom, B.S. and Krathwohl, D. R. (1956). Taxonomy of educational objectives: The classification of educational goals. NY, NY: Longmans, Green.

Brown, G. (2004). Cognitive processes in as TTle: The SOLO taxonomy asTTle Report 43,

Caniglia, J. & Meadows, M. (2018). An application of the solo taxonomy to classify strategies used by pre- service teachers to solve one question problems. Australian Journal of Teacher Education, 9(43), 75-49.

Chan, C, et al. (2002). Applying the structure of the observed learning outcomes (SOLO) taxonomy on student's learning outcomes: An empirical study. Assessment & Evaluation in Higher Education, 41(9), 511–527.

Dave, R. H. (1975). Psychomotor levels. In Armstrong, R. J, Developing and writing behavioural objectives. Tucson, Arizona, USA; Educational Innovators Press.

Dishari, S., & AlAfnan, M. A. (2023). Teaching Literature through an Emotional Intelligence Model: Psychological Impacts on Academic Performance. Journal for ReAttach Therapy and Developmental Diversities, 6(10s), 439-451.

Eng, A. & Ramiah, B. (2013). Kepimpinan Instruksional; Satu Panduan Praktikal. Selangor: PTS Akademia,

Fawcett, S. (2018). Evergreen-A guide to writing with readings. Boston, MA: Cengage.

Fink, L. D. (2003). Creating significant learning experiences: An integrated approach to designing college courses. San Francisco: Jossey-Bass.

Fink, L. D. (2013). Creating significant learning experiences. San Francisco, CA: Jossey Bass.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 269 – 285
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.5151

Gok, T. (2010). The general assessment of problem solving processes and metacognition in physics education. International Journal of Physics and Chemistry Education, 2(2), 110-122.

Goodwin, D. A. (2024). Rural Student Learning Experiences in an Online Composition Course at a 2-Year College (Doctoral dissertation, Walden University).

Guan, X., Feng, X., & Islam, A. Y. M. (2023). The dilemma and countermeasures of educational data ethics in the age of intelligence. Humanities and Social Sciences Communications, 10(1), 1-14.

Gulo, D., Telaumbanua, Y. A., Waruwu, Y., & Daeli, H. (2023). Increasing the Students' Reading Comprehension Ability in Descriptive Text Through Discovery Learning at The Eighth Grade of SMP Negeri 2 Gido in 2022/2023. Journal on Education, 6(1), 7868-7880.

Harrow, A. (1972). A taxonomy of psychomotor domain: A guide for developing behavioral objectives. New York: David McKay.

Hickman, R. (2023). Assessment, creativity and learning: A personal perspective. Future in Educational Research, 1(2), 104-114.

Jonassen, D. H. (2012). Designing for decision making. Educational technology research and development, 60, 341-359.

Krathwohl, D.R., Bloom, B.S., and Masia, B.B. (1964). Taxonomy of educational objectives: Handbook II: Affective domain. New York, NY: David McKay Co

Lazaro, G. R. D., & Duart, J. M. (2023). Moving learning: A systematic review of mobile learning applications for online higher education. Journal of New Approaches in Educational Research, 12(2), 198-224.

Nayef, E, Yaacob, N, & Ismail, H. (2013). Taxonomies of educational objective domain," International Journal of Academic Research in Business and Social Sciences, 41(9), 165-175.

Nelms, G., & Dively, R. L. (2007). Perceived roadblocks to transferring knowledge from first-year composition to writing-intensive major courses: A pilot study. WPA: Writing Program Administration, 31(1-2), 214-240.

Rademaekers, J. K. (2023, March). Composition Studies and Transdisciplinary Collaboration: An Overview, Analysis, and Framework for University Writing Programs. In Composition Forum (Vol. 51).

Radmehr F. & Drake M. (2020). Exploring students' metacognitive knowledge: The case of integral calculus. Education Sciences, 10(3), 1-20.

Sebok-Syer, S. S., Chahine, S., Watling, C. J., Goldszmidt, M., Cristancho, S., & Lingard, L. (2018). Considering the interdependence of clinical performance: implications for assessment and entrustment. Medical Education, 52(9), 970-980.

Simpson E. J. (1972). The classification of educational objectives in the psychomotor domain. Washington, DC: Gryphon House.

Slavin, R. (2018). Educational Psychology. Theory and Practice. US: Pearson.

Wiggins, G. & McTighe, J. (2005). Understanding by design. Alexandria, VA: ASCD.

Wilson, L. O. (2016). Anderson and Krathwohl – Bloom's Taxonomy Revised. Retrieved from: http://thesecondprinciple.com/teaching-essentials/beyond-bloom-cognitive-taxonomy-revised

Xu, Q., Wei, X., Bai, R., Li, S., & Meng, Z. (2023). Integration of deep adaptation transfer learning and online sequential extreme learning machine for cross-person and cross-position activity recognition. Expert Systems with Applications, 212, 118807.

Yacoub, O. (2023). Multilingual Academic Writing: Transfer from a Bridge Course. Composition Studies, 51(1), 124-134..