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The Role of Learning Styles in Acquiring English as a Second Language 1st. Bachillerato in Educative institution Lumbaqui, Sucumbíos Province.

El Rol de los Estilos de Aprendizaje en la Adquisición del Inglés como Segunda Lengua 1er. Bachillerato en la Institución Educativa Lumbaqui, Provincia de Sucumbíos.

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## **Abstract**

This study explores the impact of learning styles on the acquisition of English as a second language among first-year high school students at a public educational institution in Lumbaqui, Sucumbíos, Ecuador. The research aims to identify the most effective learning styles to enhance language learning and provide insights for teachers to adapt their instructional strategies. Through a survey conducted with 60 students, the study analyzes preferences across visual, auditory, kinesthetic, and tactile learning styles. The results highlight a strong inclination toward auditory and kinesthetic approaches, suggesting that students benefit more from interactive and experiential learning activities. Visual aids and body language also play a crucial role in comprehension. The findings emphasize the importance of differentiated instruction tailored to individual learning preferences to boost engagement and academic performance. The study concludes with recommendations for integrating multimodal teaching techniques and leveraging digital tools to support diverse learners in ESL environments.

Keywords: learning styles, English acquisition, differentiated teaching

## Resumen

Este estudio explora el impacto de los estilos de aprendizaje en la adquisición del inglés como segunda lengua (IE) en estudiantes de primer año de secundaria de una institución educativa pública en Lumbaquí, Sucumbíos, Ecuador. La investigación busca identificar los estilos de aprendizaje más efectivos para mejorar el aprendizaje del idioma y brindar perspectivas a los docentes para adaptar sus estrategias de enseñanza. Mediante una encuesta realizada a 60 estudiantes, el estudio analiza las preferencias entre los estilos de aprendizaje visual, auditivo, kinestésico y táctil. Los resultados destacan una fuerte inclinación hacia los enfoques auditivo y kinestésico, lo que sugiere que los estudiantes se benefician más de las actividades de aprendizaje interactivas y experienciales. Las ayudas visuales y el lenguaje corporal también desempeñan un papel crucial en la comprensión. Los hallazgos enfatizan la importancia de una instrucción diferenciada y adaptada a las preferencias individuales de aprendizaje para impulsar la participación y el rendimiento académico. El estudio concluye con recomendaciones para integrar técnicas de enseñanza multimodal y aprovechar las herramientas digitales para apoyar a estudiantes diversos en entornos de ESL.

Palabras clave: estilos de aprendizaje, adquisición del inglés, enseñanza diferenciada





## Introduction

The learning styles are a key piece in the teaching learning process. Every person has different learning preferences. Between the different ways of learning, some prefer to learn by hearing, some by seeing, others by doing, some by reading and others by asking questions. The ways individual learners react to the overall learning environment make up the individual's learning style.

Teachers will find some students learn best by listening, some have to observe every step, while others have to do it to learn it, and others learn well in groups, among other learning styles. It is important for teachers to know their students' learning styles because most of them have a preferred way to learn. This paper includes a review of learning styles with the purpose that know the most efficient learning style for acquiring a new language in first year high school students, and how we teachers can arrange available to assess individual learning-style differences. The studio consists of four sections, the literature review section which includes information related to education specifically to the learning styles and their different kinds. The methodology section describes the population of students in which the specific survey was carried out, interprets the environment and the characteristics of both students and structures, and describes the procedure that was developed during the application of the survey. In the following section, there is the data analysis, this part includes graphics and interpretations. Finally, in this document there are the conclusions and recommendations that allow to the teachers know the most efficient learning style for acquiring a new language in first year high school students.

The first part sets out the theoretical support for learning style research by examining the definitions, theoretical models and classifications of learning style, drawing from general psychology and the language education research fields. Subsequent to, looking at the concepts and classifications, it analyzes essential factors related to learning styles, such as cultural and educational background, in accordance with the specific context for this research - English



language as a second language acquisitions SLA. In the 1<sup>st</sup>. Bachillerato in Public Educative Institution Lumbaqui.

According to Oxford (2017), learning styles are distinct preferences and approaches that learner use to absorb and understand new information. These styles, such as visual, auditory, and kinesthetic, shape the effectiveness of language learning by aligning teaching methods with students' cognitive tendencies. Every person has a learning style, it has as individual as a signature. Knowing students' learning styles, as teachers, we can organize classrooms to integrate to their individual needs for quiet or sound, bright or soft illumination, warm or cool room temperatures, seating arrangements, mobility, or grouping preferences. Furthermore, we can know the situations which learners' tent to concentrate best, in pairs, alone or groups.

(Wong, 2015) stablishes that the term learning styles refers to learners preferred general approach to learning, which includes the process of captivating, processing, and retaining new information, in general psychology. In the research area of second language acquisition, the term language learning styles refers to language learners preferred general approach of language acquisition. Learning styles are defined in different ways. Below are some definitions of learning styles:

"Learning style is a composite of environmental and perceptual preferences, which influence our physical and sensing needs; cognitive variables, which determine how we approach, conceptualize, and structure our world; and social preferences, which arise from cognitive, personality, affective factors and which shape our behavioral tendencies in learning situations." (Galloway & Labarca, 1990, p. 113)

"(Learning styles refer to) the characteristic cognitive, affective and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with and



respond to the learning environment... Learning style is a consistent way of functioning, that reflects underlying causes of behavior." (Keefe, 1979, p. 5)

After on the definitions above, it can be determined that most educational researchers rift learning styles into four different key aspects, namely cognitive, affective, physiological/sensory, and behavioral. Besides learning styles can change in different circumstances and stages of life, and environmental reinforcement can affect in the shaping of learning styles. For example, rewarding learners who use certain styles can lead to their preferences for those styles. Also, designing learning tasks which are more optimally performed with certain styles can also cause learners to prefer certain styles. Through the socialization one's value system is related to the development of learning styles.

Biggs,2011 as cited on (Cimermanová, 2018) indicates that Learner styles are characteristics that are measured especially in selecting the most appropriate methods, techniques and learning strategies. Usually, people possess more than one style (does not matter which categorization or classification is considered), they have "profile of styles"

(Sener & Cokcaliskan, 2018) identify six main learning styles; visual learning, auditory learning, kinesthetic learning, tactile learning, group learning, and individual learning.

Visual learners: Visual learners learn best in images, diagrams, whiteboards and more helps these types of learners understand information better. The learners prefer sitting in front of the class because, they are careful about teachers' body language, and are able to understand the situations, or conditions. Auditory learners: Auditory learners prefer processing information through listening and interpreting via pitch, emphasis, and speed. Sound and music are a solid suit for these types of learners who typically have a good sense of rhythm. In addition, these learners favor reading aloud in the classroom.



Kinesthetic learners: These individuals learn info through active "hands-on" approach. Getting hands-on is a must for these learners who love to tinker and learn best when they can do rather than see or hear. They gain information from interaction with the physical world. They have difficulty in concentrating on the situation.

Tactile learners: This type of learners learn best by using their hands. They frequently underline what they read, take notes through listening, and keep their hands busy. They prefer touching things to learn about them. Individual learners: These students prefer to use self-study and work alone. When people like their privacy and are independent, and introspective, they are probably individual learners. Learners with individual preference often can emphasis on the issues well, be aware of their own thinking, and investigate in a different way what they think and feel.

Group learners: These individuals are virtuous at communicating well with people, both verbally and non-verbally. These students know how to communicate successfully and enjoy collaborating with others, thinking and discussing ideas and concepts. They prefer mentoring and counseling others. Considering the importance, learning styles in the second language acquisition, it is essential to analyze some previous studies related to this topic. For this reason, three researchers have been studied to consider different points of view related learning styles. The results of those researched are detailed below.

Awla (2014) carry out a study to identify how teachers understand their students learning preferences as well as the extent of mismatch between students' and teachers' styles which has led to students' low performance and frustration. The sample was 12 teachers and 168 students from eight EFL classes in Vietnam. A questionnaire survey consisted of 44 close ended questions was distributed among the students of low upper intermediate and intermediate classes. Student teacher style matching was measured by class observation.



The results showed that the Vietnamese learners were more visual than verbal, more intuitive than sensing, more sequential than global, and more active than reflective. While the teachers' role was to guide students to particular learning styles, they had to familiarize themselves with new teaching styles. Despite the failure of style stretching by some students and teachers, the study confirmed the advantages of style stretching and matching.

Cimermanová (2018) examined that The Effect of Learning Styles on Academic Achievement in Different Forms of Teaching. Researchers have shown an increased interest in learner styles as one of the key factors influencing learning generally. The principal objective of the research presented in the study was to find out whether learning styles of students and the form of teaching generate interaction effects on their learning achievements. Learning styles of the sample subjects and pedagogical quasi experiment was conducted within the period of one semester.

The research used a convenience sample of 81 fifth year university students (pre-service English language teachers) split into control (n = 55) and experimental (n = 27) groups.

The results of a two-way analysis of variance (ANOVA) showed no significant findings.

The major findings are as follows: (a) learning styles have no significant effect on academic achievement; (b) form of teaching has no significant effect on academic achievement; and (c) students with different learning styles do not statistically significantly differ in their academic performance based on the form of their study. Papadatou et at el (2021) developed a study about of Variability of Higher Education Students' Learning Styles Depending on Gender, Course, Degree and Institutional Context. The aims guiding the research were to describe the learning styles predominating among students in the field of the social sciences, to analyze the results with respect to gender, year of study, degree course and institution, and to perform correlation analysis between these variables.



The data analyses were carried out with non-parametric statistics with a confidence level of 95%. The sample was composed of 636 students at the Universities of Huelva (UHU), Cádiz (UCA), and Pablo de Olavide of Seville (UPO), who completed the Honey–Alonso Learning Styles Questionnaire and reported sociodemographic and educational data. The results showed a significant preference for the Reflector style. Significant correlations were found in most variables highlighting that the courses showed an inverse correlation with the learning styles, the activist, Theorist, and Pragmatist styles being less preferred as they progressed in the career.

# Methods and materials

This study was conducted in an Ecuadorian public high school in Sucumbios Province, located in the urban area in Lumbaqui city. The participants of this study were sixty learners of first Senior High School. Simultaneously, the Education Institution labor in the morning with forty minutes per class time and at least thirty-five students per classroom with a teacher.

Description of the sample data collection took place during the academic year 2022/2023 sing, for convenience, non-probabilistic sampling. A total of 60 learners took part, of which were male (21.35%) and 39 were female (65%); ages ranged between 15 and 16 (SD = 28; 16 and 17 (SD = 33). The questionnaires were designed to ensure the anonymity of all respondents and were completed on a voluntary basis by all those attending class across the degree subjects involved on the day stipulated for their administration.

The questionnaire was applied the last week of May and first week June of the 2022. The response rate was 100%, as the questionnaire was reviewed prior to delivery to prevent incomplete questionnaires.



# **Analysis of results**

This part presents the statistical data obtained from sixty learners' questionnaire regarding learning styles that could learn best students in second language acquisitions.

The investigation was carried out through questionnaire in public educational institution and the results were organized charts with specific questions based on the criteria of the question subject, with the use of five-points scales, with the parameters strongly agree, agree, neither agree nor agree, disagree and strongly disagree.

I remember things when I hear better than things I see.

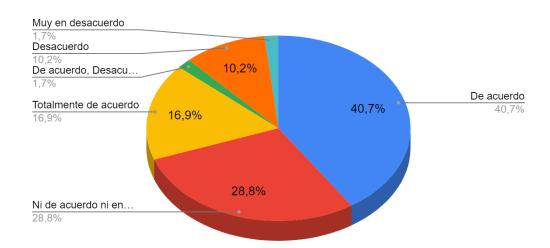


Figure 1: Auditory style

Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The findings highlight the significance of auditory learning in English language acquisition.

A considerable percentage of students (40.5%) agree that they learn better when they can both hear and see the language, reinforcing the idea that auditory input plays a crucial role in



comprehension. In contrast, only 10.2% of students disagree, indicating that the majority benefit from verbal interactions.

Auditory learners process information through sound, relying on verbal discussions, listening activities, and variations in speech, such as tone, pitch, and speed. This suggests that traditional reading methods may be less effective for them, as they grasp meaning more effectively when reading aloud or engaging in spoken exercises. Consequently, incorporating audio-based teaching strategies, such as listening activities, discussions, and oral repetition, can significantly enhance their language learning experience.

# Follow oral directions better than written directions.

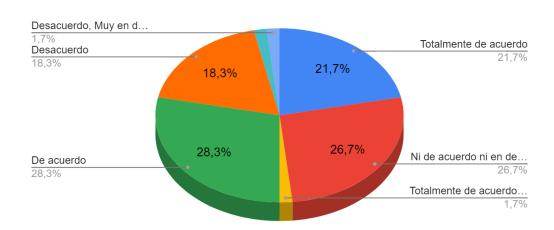


Figure 2: Auditory style

Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

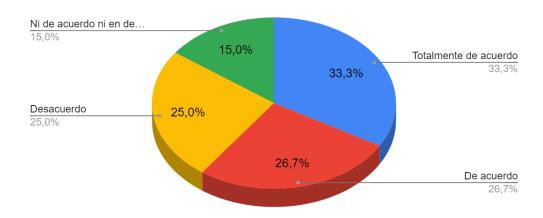
The results reveal a notable preference for oral instructions among *auditory learners*. A significant 28% of students agree that they follow oral directions more effectively than written ones, whereas only 1.7% strongly disagree. This suggests that a considerable portion of students processes and retains information better through spoken communication rather than written text.



Auditory learners rely on verbal cues, tone, and speech patterns to understand instructions, making oral explanations more effective for them. This finding underscores the importance of incorporating spoken directions, discussions, and verbal reinforcement in the classroom. Teachers should consider complementing written instructions with oral guidance to enhance comprehension and engagement for these learners.

# I learn better by listening to a lecture than by reading a textbook.

Figure 3: Auditory style



Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

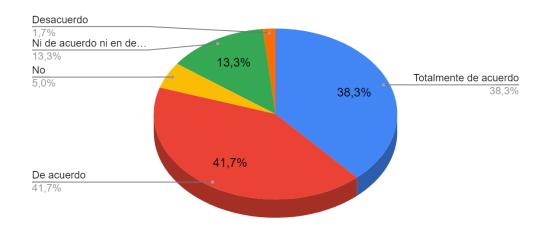
The results clearly show that most students prefer learning by listening rather than reading a textbook. A significant 33.3% of students totally agree with this, while 26.7% also agree. On the other hand, 25% disagree, and 15% remain neutral. This highlights an important difference in learning preferences—many students absorb information more effectively through listening rather than through traditional reading. They find it easier to understand and retain knowledge when they hear it, whether through discussions, audio materials, or storytelling. Given this, incorporating



more listening-based activities, such as audiobooks, podcasts, and interactive dialogues, could greatly enhance their learning experience and make language acquisition more engaging and effective.

I learn how objects work by taking them apart and putting them back together.

Figure 3: Kinesthetic style



Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The results highlight the effectiveness of *collaborative*, hands-on activities for kinesthetic learners. A significant 41.7% of students agreed, and 38.3% strongly agreed that participating in tasks and using objects helps them learn better. This suggests that tactile activities play a key role in enhancing understanding and retention of knowledge. However, 13.3% of students neither agreed nor disagreed, indicating that such methods may not be as effective for everyone. These students may need a more balanced approach to learning that incorporates other styles. Overall, the data shows that engaging students in active, collaborative learning can improve their learning experience, particularly for those who thrive through physical interaction and hands-on tasks.



I need to participate in an activity in order to learn how to do it.

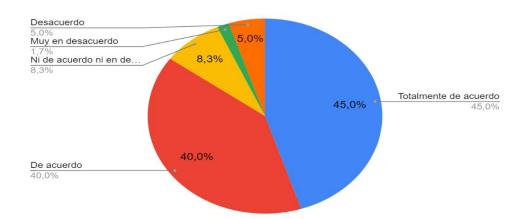


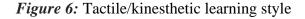
Figure 5: Kinesthetic style

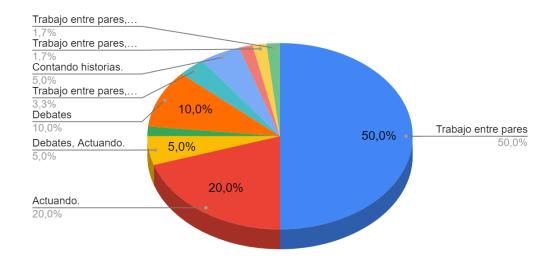
Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The results clearly show that students with a *tactile/kinesthetic learning style* prefer to be actively involved in their learning process. A strong majority, 45%, strongly agreed, and 40% agreed that they need to actively participate in each activity to engage fully and develop knowledge. This indicates that hands-on, participatory learning is crucial for their understanding. Only a small percentage, 8.3%, were neutral, and 5% disagreed, suggesting that while most students thrive in active environments, there are a few who may not feel as strongly about this approach. Overall, the findings demonstrate that students enjoy doing activities and are more likely to learn effectively when they are directly involved in the process, reinforcing the value of interactive and engaging tasks in their education.



# Classroom, I enjoy participating in:





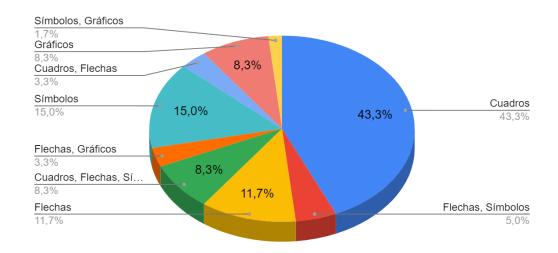
Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The data reveals that students, particularly those with a *tactile/kinesthetic learning style*, thrive when they can engage in peer work. Half of the learners, 50%, reported enjoying this kind of collaborative activity, suggesting that learning becomes more effective when they can interact with others. Additionally, 20% of the students find acting out stories to be a helpful way to absorb knowledge. This reflects a preference for learning in social settings, where students actively participate and apply their learning in a hands-on, interactive way. These findings emphasize that tactile learners benefit from social and dynamic learning experiences, where they can engage with peers and physically act out or participate in activities to reinforce their understanding.



## When I take notes. I use:

*Figure 7:* Tactile/kinesthetic learning style



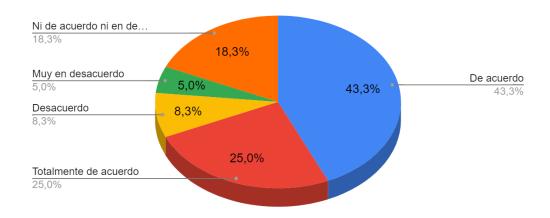
Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The data indicates that students with a *tactile/kinesthetic learning style* benefit from using pictures and symbols to improve their writing skills. A significant 43.3% of the students use pictures as a way to enhance their understanding and expression, while 15% incorporate symbols to connect ideas. This suggests that visual aids are a powerful tool for these learners, helping them organize and communicate their thoughts more effectively. By engaging with images and symbols, students can better grasp concepts and express themselves creatively, highlighting the importance of incorporating visual elements into their learning process for better results.



I need explanations of diagrams, graphs, and maps in order to understand them.

Figure 8: Visual learning style



Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The data shows that students with a visual learning style find it easier to understand explanations when diagrams, graphs, and maps are used. A notable 43.3% of students agreed that these visual aids help them learn better, while 25% strongly agreed. This suggests that incorporating visual elements into lessons significantly enhances their ability to grasp and retain information. For these students, seeing concepts represented visually helps them connect ideas and make sense of complex information more effectively. This reinforces the value of using diagrams, graphs, and maps as key tools for improving understanding and engagement in the learning process.



I learn a lot about a person by observing their facial expressions and body language.

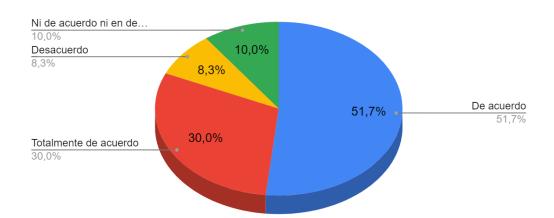


Figure 9: Visual learning style

Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The data shows that students with a *visual learning style* find it easier to understand explanations when diagrams, graphs, and maps are used. A notable 43.3% of students agreed that these visual aids help them learn better, while 25% strongly agreed. This suggests that incorporating visual elements into lessons significantly enhances their ability to grasp and retain information. For these students, seeing concepts represented visually helps them connect ideas and make sense of complex information more effectively. This reinforces the value of using diagrams, graphs, and maps as key tools for improving understanding and engagement in the learning process.



I use my hands when explaining something to another person.

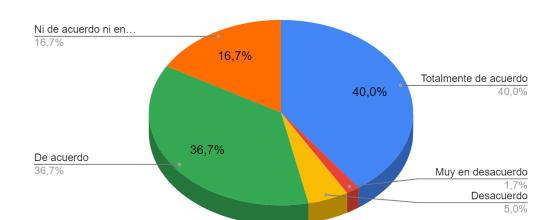


Figure 10: Visual learning style

Note. Results of the students' questionnaire conducted at public Educative Institution Lumbaqui.

The data reveals that students with a *visual learning style* find it effective to use body language, particularly hand gestures, when explaining things to others. A strong 40% of students strongly agreed, and 36.7% agreed that using body expressions helps them communicate and understand better. This suggests that for these learners, incorporating physical gestures and body language not only aids in explaining ideas but also enhances their own learning. The results highlight that body language is an important tool for both learning and teaching, helping to reinforce understanding and making communication more engaging and effective.



## **Conclusions**

The present study on learning styles highlights the diverse ways individuals process and retain information, emphasizing the necessity of adapting educational methods to cater to different learners. The findings indicate that understanding and accommodating learning styles can significantly enhance academic performance, motivation, and engagement.

It was observed that students benefit greatly when instructional strategies align with their preferred learning styles. Visual learners, for instance, grasp concepts more effectively through diagrams and charts, while auditory learners excel when information is presented through discussions and lectures. Kinesthetic learners, on the other hand, thrive in hands-on activities and experiential learning environments.

Furthermore, the study underscores the importance of a flexible and inclusive educational approach that integrates multiple learning strategies. This not only fosters a more dynamic learning environment but also helps students develop skills outside their dominant learning styles, making them more adaptable and well-rounded learners.



## Recommendations

Educators should incorporate a variety of teaching methods, such as visual aids, interactive discussions, and hands-on activities, to address the needs of different learners effectively. Implementing multimodal teaching approaches allows students to engage with the material in a way that aligns with their cognitive strengths, leading to better comprehension and retention.

Schools should implement tools to assess students' learning styles at an early stage, enabling teachers to tailor their instructional strategies accordingly. Conducting regular evaluations can help educators adapt their methods dynamically, ensuring that each student's needs are met throughout their educational journey.

Digital resources, such as educational videos, interactive simulations, chatbots and online discussion forums, should be leveraged to cater to different learning preferences and enhance the overall learning experience. Technology can also be used to personalize learning pathways, providing students with customized content that suits their specific learning styles and paces.



# **References Bibliography**

- Awla, Hawkar. (2014). Learning Styles and Their Relation to Teaching Styles. International Journal of Language and Linguistics. 2. 241. 10.11648/j.ijll.20140203.23.
- Cimermanová, I. (2018). The Effect of Learning Styles on Academic Achievement in Different Forms of Teaching. International Journal of Instruction, 11(3), 219-232.
- Papadatou-Pastou, M., Touloumakos, A. K., Koutouveli, C., & Barrable, A. (2021). The learning styles neuromyth: when the same term means different things to different teachers. European Journal of Psychology of Education, 36(2), 511-531.
- Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. Psychological science in the public interest, 9(3), 105-119.
- Sener, Ç. (2018). An Investigation between Multiple Intelligences and Learning Styles. Journal of Education and Training Studies.
- Wong, W. L. (2015). A Study of Language Learning Style and Teaching. Cantenbury.