



# A research project on learning styles and learner strategies

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reports on a study she carried out in Austria.

This article discusses the implications for teachers from a small-scale research project carried out at the language institute of the University of Graz, Austria, and was run in four general English classes of B1 level. The aim of the study was to determine if the strategies learners used was reflected in their primary learner preferences.

At the beginning of the semester, learners were given a questionnaire to determine their preferred modes of

learning. These were based on three different models which were also discussed in class. All together, 66 students took part, the majority being female (48) and from Austria (50). Nine other nationalities were also represented (ranging from one to three students). The questionnaires were designed for learners to reflect on their individual learner preferences and included three additional control questions which named strategies not usually used by these particular learners (unless they have stretched out of their particular preferred learning modes). The control questions were not explicitly pointed out, however, in order to gain more accurate knowledge of strategies used by the learners. The last part of the questionnaire asked the learners to

note down the activities done during the semester that had helped them learn and to explain what it was about the activity that was helpful for them.

The models chosen are mentioned by Andrew Cohen (2002:163) who suggests there are three different areas of preferences to look at.

Although numerous distinctions are emerging from the literature, three categories of style preferences are considered particularly relevant and useful to understanding the process of language learning: sensory/perceptual, cognitive and personality-related preferences.

– Andrew Cohen (2002:163)



The models used in this study, therefore, included:

- the standard 'VAK' model (although the kinaesthetic channel is divided into motoric and emotional);
- the 'global-analytic' model (also known as field-dependent [global] and field-independent [analytic] learners); and
- mind organisation (a way of determining personality-related characteristics to see how these affect both behavior and learning strategies).

While evaluating the questionnaires, it was clear that a number of learners had strengths in more than one sensory channel. It is important to remember that most learners who are at the university level have learnt to cope with their studies by receiving, processing and remembering information in more than one channel. They may be most comfortable with their primary one but have already developed some stretching strategies. The breakdown of learner preferences showed that the largest number of students (14) felt they were primarily visual with only one claiming an auditory preference. The rest felt they were kinaesthetic emotional (6) or kinaesthetic motoric (4). As this survey

was carried out in an elective subject, with learners from a wide range of fields, the breakdown was not surprising, as these learners need to rely heavily on reading texts and writing papers. However, those who felt they were primarily visual made use of what we generally consider to be highly visual activities, for example, writing down

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things to remember them and using colours and highlighters. They also made the most use out of coping strategies which involved activities like rearranging material so they did not memorise it in a particular place or order. As the sample size of auditory learners was so small, it was difficult to draw conclusions as no clear patterns emerged. However, those who were auditory along with another sensory channel tended to repeat information to themselves and took notes less frequently than visual learners. The kinaesthetic-emotional learners mentioned making personal connections to the material they needed to learn and felt best in comfortable atmospheres with people they liked. Kinaesthetic-motoric learners indicated they often walked around while learning and frequently tried information out for themselves. However, most learners were able to sit still and study for long periods, a skill that university students generally need to possess.

The split between global and analytic students was more pronounced, with 21 indicating they were more global, 29 more analytic, and 13 feeling they were in the middle. The strategies used by the global learners showed a preference for creating their own overview of material,

finding ways to be creative and using a holistic approach before finding details. The analytic learners, on the other hand, often used the details to create a big picture. There was a marked difference in the strong showing of the analytic learners of preferring to work on one thing at a time, feeling more comfortable working alone than in groups, and in setting goals and recording progress. Analytic learners also felt they were better at motivating themselves than global learners, whereas the global learners often felt that they could find ways to use their creativity and imagination.

The last model we looked at is called mind organisation and was developed by April Bowie and based on work carried out by Anton Gregorc (1982). Bowie looked at both personality-related characteristics and how these affect behaviour and learning strategies.

This model includes four distinct types which are determined by how people perceive the world around them (either concretely or abstractly) and how they then organise the information (systematically or nonsystematically). People who receive information concretely through their sensory channels and then organise it systematically were given the name 'Power planner'. They are usually structured, dependable, punctual, hard-

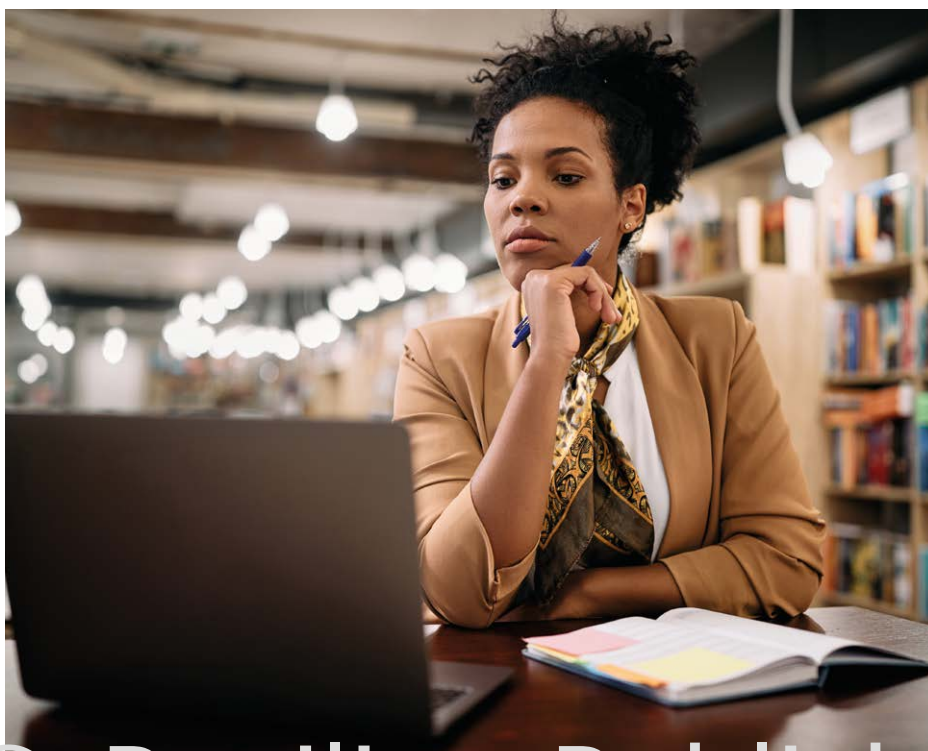
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working, practical and task oriented. They are uncomfortable with constant change and do their best to finish what they start. The next group were classified as 'Expert investigators' who perceive abstractly through concepts and thoughts and organise systematically. They tend to be very logical, see things objectively and can more easily put their emotions aside. They rely on facts and theories and are good with abstract ideas. Those who perceive abstractly through feelings and organise nonsystematically were called 'Flexible friends'. They are people-oriented, creative and imaginative, as well as compassionate and empathetic towards others. They are also more spontaneous than the two previous types and value personalised learning. The last of the four groups are called the 'Radical reformers'. They perceive concretely through their senses and organise nonsystematically. These learners tend to be risk takers and

curious about different options for solving problems. They often use intuition and may be quite competitive. They are also strong-willed, want to feel unique, thrive on change and generally need real-world situations to learn easily. The breakdown of types showed there were equal numbers of Power planners and Expert investigators (16 each) then six Flexible friends and five Radical reformers. These numbers may well have to do with the fact that the first two types may simply be more suited to studies at a university.

Evaluating answers about strategies showed that the Power planners often made check lists, related learning material to real-life situations and needed exact information before beginning tasks. However, they scored lower than other types on accepting change in routines. The Expert investigators, for the most part, felt they often needed more time to finish a task, as they tend toward perfectionism. The Flexible friends tended to find out who could help them if they needed help, found personal connections to the material they were learning, and enjoyed finding fun ways to organise their timetables. However, they had to work harder to make decisions with their heads rather than their hearts. The Radical reformers more often showed a tendency to experiment with new learning strategies and scored higher than other types on getting tasks done while keeping their own identities and sense of uniqueness.

The last part of the questionnaire asked students to note down activities which helped them to learn and explain why. Visual learners felt cards with pictures were easier to remember, liked to see words written out, felt videos made learning grammar better for them than explanations, and visual aids like Venn diagrams helped them see the differences in a topic more easily. Auditory learners



liked pairwork activities when the answers they needed were supplied by a partner, activities in which they read aloud as they remembered what they heard or said, and speaking in class. Kinaesthetic-motoric learners found activities that let them move about the classroom, or games that were interactive, were helpful for storing information. Kinaesthetic-emotional learners said they learnt best when they spoke about their own lives, preferred the 'U' form of seating because it gave them a sense of community, found groupwork and pairwork conducive to learning because they had a partner, and preferred activities they found fun.

Global learners also needed activities which were active and fun (similar to the kinaesthetic-emotional learners) but also information which gave them an overview. Analytic learners needed to understand concepts of grammar, liked finding connections between skills and grammar, learnt from activities which required logic and critical thinking, or enjoyed speaking about common mistakes, so that they could avoid them in future.

Power planners felt videos and activities in which they had to speak in full sentences were helpful because they demonstrated concrete situations and examples. Expert investigators liked explanations and texts, gaining new knowledge, thinking of definitions for words and applying what had been learnt earlier in the semester. Flexible friends often needed to work with others and found that pairwork and groupwork helped them to remember, as well as giving them the chance to improve their pronunciation by speaking with others. Radical reformers enjoyed games that encouraged spontaneity, pairwork which challenged them in one-to-one situations, and activities for which they had to come up with unusual ideas of their own.

It was also possible to determine stretching strategies in the comments made by learners. A kinaesthetic-motoric learner commented that a gap text in a song made him listen more carefully, an analytic learner liked an activity which helped them access a feeling about grammar, and a visual learner gained confidence speaking in a pairwork activity.

As a conclusion, it became clear throughout the research project that, although there



were a number of different learner types in the classroom, mixing methods made it possible to reach them all. They may have approached tasks differently, and got different things out of them, but it was never necessary to 'teach to one learner type'. One activity, in fact, was mentioned by almost all the types, albeit for different reasons. This was a grammar bingo sheet designed to practise tenses and vocabulary before the mid-term exam. It consists of a grid with questions which learners filled in at home and brought to class. They then mingled in the classroom asking each other questions with the goal of finding five different people in a row (across, down or diagonal) whose answers matched theirs. The visual and global learners found it helpful that all the tenses were on one page, the auditory learners remembered by asking and answering questions, the kinaesthetic-emotional learners and the Flexible friends were interested in finding out information about classmates, the kinaesthetic-motoric learners were glad to move around the room and the Power planners were happy to review all the material for the exam in an unusual way.

In conclusion, the question of learning strategies was clearest when the sample size was large enough to get a variety of answers. However, the most enlightening part of the project for me was the clear indication that a good activity will appeal to more than one type of learner and is helpful for learning, as the different learner types will approach it in the

way that helps them the most, enabling storage and processing of material so that they can use it in future.

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## Further reading

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**Marjorie Rosenberg** has been teaching in Austria for over 40 years, working at tertiary level with adults and teachers. She has written several methodology books on learner preferences, as well as coursebooks

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