The relationship between gender and learning styles amongst A level modern languages students

Anne-Marie Maubach and Carol Morgan University of Bath

This article describes research conducted with 72 MFL A level students regarding possible links between gender and learning styles. In terms of confirming conventional wisdom, findings only coincided in four areas: 'male' risk-taking, spontaneous speaking and self-confidence; and 'female' organisation of written work. Gender-linked differences in other areas were not confirmed.

INTRODUCTION

The aim of this article is to examine the truth of certain theories relating to the relationship between gender and language learning with reference to the preferred learning styles of a small sample of Year 12 and 13 sixth-form students of A level French and German. This inquiry is based on a questionnaire (Appendix A) completed by 72 A level students: 57 girls and 15 boys. The survey results are analysed in relation to established theories about the relationship between gender and language learning, and in the light of the data received from this study some provisional conclusions are drawn as to the relationship between gender and learning styles and activity preference in the study of foreign languages at A level.

BOYS AND GIRLS: BIOLOGICAL DIFFERENCES

Let us first examine theories concerning sex difference and verbal skills. It seems to be generally recognized that biological differences between the male and female brain do play a role in the development of cognitive skills. Maccoby and Jacklin (1975) support the generalisation of girls' superiority over boys in the early acquisition of speech. Their tests also show girls from the age of 10 outscoring boys on a variety of measures of verbal competence, but conclude that this may simply show a slower rate of linguistic maturation on the part of boys. By the time students start A level courses, developmental differences may therefore have evened out.

Swann (1992) considers the issue of brain

lateralization which holds that sex differences in verbal ability are very slight, but remains unconvinced that there is an association between stronger lateralization, as in the male brain, and weaker linguistic skills. If only one side of the male brain is working during verbal tests, compared with both right and left hemispheres in the female brain, it might be assumed that women have the advantage in language learning. An assumption that boys are biologically second class in the foreign language classroom could be seen as offensive by many, and certainly there is a danger of reinforcing general trends in the uptake of foreign languages among boys post 16, if they are viewed as linguistically less able than girls from the outset. (Callaghan though takes the opposite view, 1998.)

If we do accept the role of biology in determining linguistic achievement, there may be grounds for separate teaching programmes for the two sexes, as trialled recently by Barton (1996), who appears to have experienced some success in addressing the issue of male underachievement at GCSE level in modern languages. The effects of segregating the sexes for language lessons and finding a teaching strategy to suit the learning styles and interests of boys may uncover some valuable answers to this concern. Dividing the sexes at A level will, for the time being, remain impossible in the majority of mixed schools, where the number of boys choosing to pursue foreign languages is so low. Clark (1998) speaks of a "dramatic gender polarisation post-16," quoting the DfEE Statistical Bulletin figures for 1997, which illustrate the low numbers of boys taking French at A level. If these trends of poor performance among boys at GCSE and low take-up at A level persist, the argument about innate gender differences may seem to gain strength.

Suzanne Graham's review of the research into gender-related differences and language learning ability asserts (1997: 99), however, 'that innate

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differences are non-existent or at best insignificant...the higher incidence of successful linguists among girls must therefore be attributed to such factors as socialisation, attitudes and stereotyping.'

Rafik Loulidi (1990) states that the biological evidence is "scant and inconclusive", finding other explanations for boys' unwillingness to study languages: sex and career stereotyping, attitudes to the subject and teacher, and socio-cultural pressures. Pritchard (1984) sees a difference in boys' attitudes towards French and German, relating male preference for German with the cultural associations of these two subjects: French apparently following more traditionally female interests such as cuisine, fashion and perfume, and German linking to topics of more 'male' interest such as war, industry and cars. These cultural interests seem insufficient to explain the poor recruitment of boys to French A level, as A level courses involve much more purely linguistic work than topic-based study and there is now more scope for teachers and students to make an independent choice of topics, according to preferred interests. The day-to-day experience of language learning in the classroom would appear to be a more fundamental question.

Whether the causes are biological or sociocultural, it seems that modern languages teachers face a more extreme gender divide than many other subject areas. There may be no clear answer to the causes of this situation, but further investigation into perceived gender differences can only help to inform the teaching styles of practitioners. It was decided to take a closer look at the preferred learning styles of a sample of students in order to see if typical assumptions about gender difference in language learning held true for them. In an illuminating article Dianne Place (1997) draws together a list of characteristics commonly held to describe girls' and boys' approaches to learning a foreign language. From this list, and using Brown's (1994) descriptors of learning styles, ten key areas were selected which seem to be most likely to reveal a gender divide in the students' approach to their work. The questionnaire design itself relied heavily on Brown's learning styles' checklist (1994), but this was adapted to focus on issues which may reveal more divisive answers between the sexes. Some important caveats to this study are outlined below.

CAVEATS

The selection of the characteristics used in the questionnaire was based upon one researcher's view of the issue and upon her observations from teaching experience, and it could certainly be argued that there are other equally valid or more valid characteristics which merit investigation. The questionnaire itself was limited in scope, reducing each characteristic to a simple statement, which

inevitably involves personal interpretation of the theory. Before completing the questionnaire, students were informed only that this was to form part of a study about the different ways in which people learn effectively. No reference was made to gender difference, in order to reduce the likelihood of respondents answering in stereotypical ways. For ease of analysis, the questionnaire places supposedly male characteristics on the left hand side (boxes 1 and 2) and corresponding female characteristics on the right (boxes 4 and 5). (Here 1 and 5 indicate strong agreement and 2 and 4 just agreement with the given statements; see Appendix 1). If responses followed the expected pattern, these would then be visible at a glance. This format does, however, have the weakness that students could identify this pattern and that this could influence their responses.

There was also the danger that some responses, such as claiming to have a well-organised file as opposed to an untidy one, could appear more positive than others and that students might wish to convey the best possible image of their study patterns. In an attempt to overcome this, they were asked to respond truthfully and were informed that their answers would play no part in the assessment of their work, so that they would be less likely to answer in the way they thought their teacher would want. As the findings were based on these selfreporting techniques, a student might have had the opportunity to create a certain picture of their approach to work, positive or otherwise, which might then have led to some unreliability in answers. A larger-scale study could perhaps include a specific task to test whether student learning styles were actually consistent with the answers given in the questionnaire.

The sample group is also rather small in size, partly due to the difficulty of finding boys studying a foreign language to A level, and there would, therefore, be considerable danger in assuming any applicability of these results to the wider teaching of modern languages. As only boys who had chosen to continue their study of French or German were involved, this study inevitably excludes the more extreme problems and characteristics of boys who have not enjoyed success in GCSE languages. Finally, it is important to note that even if clear gender differences do arise in the study, we can only ever talk in generalised terms about tendencies, as every learner has a unique personality which will influence learning far more than gender. This view is supported by Clark (1998), who, after carrying out extensive interviews with pupils of modern languages across gender and ability groups during a five-year period, comments that intelligence and socio-economic background are likely to have a greater influence on perceptions of modern languages study than gender.

Language Learning Journal

QUESTION ONE: FIELD DEPENDENCE

The first question posed to students aimed at discovering whether there was any male/female divide amongst the students in terms of their field dependence. Brown (1994: 106) defines field dependence as: 'the tendency to be "dependent" on the total field so that the parts embedded within the field are not easily perceived, though that total field is perceived more clearly as a unified whole.'

For sixth-form language learners, we might interpret field dependence as the ability to see the whole picture, perhaps understanding the gist of a difficult text, (rather than focusing on complete understanding of individual sentences) — a skill very much emphasised by modern A level syllabuses, which require students to work at speed through a variety of texts.

Oxford (1994: 141) states that: 'females, especially adolescents and adults, tend to be more field dependent (global) and males more field independent (analytic)'. Answers to the questionnaire demonstrated compatibility with this theory in that none of the boys in the sample chose the highest score 5 for being presented with the whole picture if this meant taking in a lot of new information at one time. Yet far fewer than one might expect, only 2 of the 15, chose the box closest to the typical field-independent statement: 'if I have a large amount of new material to learn, I like to take things one step at a time'. Yet the majority did show a preference for breaking information down into smaller steps. Surprisingly, however, so did over half of the girls surveyed. The option of being able to see the whole picture at once appealed strongly to only 4 girls. The average score for this question thus revealed no significant gender difference.

QUESTION TWO: DEDUCTIVE v INDUCTIVE LEARNING

The second question originated from the theories of left- and right-brain functioning, and research on the biological differences in brain lateralization has already been mentioned. Brown (1994) comments that the left hemisphere is associated with logical and analytical thought, whereas the right hemisphere is more efficient in processing visual and emotional information. Brown (1994) also refers to research by Krashen, Seliger and Harnett which seems to indicate that left-brain dominant learners prefer to be presented with a rule they can then consistently apply (deductive learning), whereas right-brain dominant learners prefer to uncover the rules for themselves (inductive learning). Oxford (1994) reports that females tend to favour subjectivity and emotional responses when learning a new language, while males prefer objectivity: working from rules, facts and logic. The males in the survey did indeed

express a preference for a deductive grammatical learning method, with just over half giving the application of rules presented to them the highest score (l). It seems that the word 'logic' had much greater appeal than the thought of using intuition. However, approximately 73% of girls in the survey also selected response 1 or 2 (as opposed to 80% of boys), indicating a preference for the presentation of grammatical rules as opposed to trusting their intuition in this respect. Here again, then, there did not appear to be significant gender differences.

QUESTION THREE: TOLERANCE OF AMBIGUITY

Tolerance of ambiguity can be a key area for foreign language learners. From anecdotal evidence, students of French often complain that when it comes to learning the formation of verbs, there seem to be more verbs that are exceptions than verbs which follow the rules, and clearly this can be a factor adversely affecting the motivation of those who have a low tolerance of ambiguity. The third question in the questionnaire is a measure of this tolerance or lack of it amongst the students. The boys in the sample showed quite a high tolerance of ambiguity, almost half choosing score 4 in answer to this question. However, we might expect a higher tolerance of ambiguity amongst males who have chosen to study languages post-16 than amongst the male population at large. The females in the sample actually demonstrated a lower tolerance of ambiguity in their answers than the males, with 37%, choosing scores 1 and 2 in answer to this question, perhaps influenced by a term's work which had emphasised grammatical accuracy. Again, traditional notions of learning styles of males and females did not appear to be supported by the questionnaire findings.

QUESTION FOUR: REFLECTIVITY

Reflectivity, as opposed to impulsivity, can also be important for students working towards improved accuracy in their use of a foreign language. In the group of A level students chosen, observation had suggested that the majority of students were reflective thinkers, whose concern for accuracy could often hinder their willingness to contribute orally. However, this degree of reflectivity can often be a strength when producing written work requiring a high standard of grammatical accuracy. Students who contribute impulsively to class discussions seem to develop confidence orally. Yet in answering questions to which answers are to be found in a written text, these students often prefer to give their own answers, which may be interesting and inventive but may show little or no comprehension of the text. Oxford (1994) comments that females tend to

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be more reflective than males, yet this survey appears to show a reversal of the trend, with 7 of the 15 boys selecting box 4 in answer to question 4, and only a third of girls selecting boxes 4 and 5. Perhaps this unusual male unwillingness to guess at answers had something to do with the particular classroom situation in which they were very much in the minority. The risks of guessing and being wrong may, for instance, have involved losing face in front of a class full of girls.

QUESTION FIVE: VISUAL V AUDITORY STIMULUS

Preference for visual stimulus over auditory input is proposed as a male characteristic, but again this did not fit the questionnaire results regarding the use of diagrams as opposed to tapes in private study. Theories of brain lateralization, such as those cited by Swann (1992), would indicate a female preference for audio work, with right-brain dominance aiding recall of emotional and auditory information, and the left-brain hemisphere, more dominant for the male, being associated with linear and diagrammatic processing of information. Swann (1992) considers that such biological determinism presents a gloomy outlook for male language learners, as it implies there is little a teacher may to do to change the gender imbalance in foreign language learning. The survey results do not follow the expected gender pattern in answer to this question, as almost 40% of both girls and boys in the sample expressed a preference for either listening or visual stimulus in learning. Only 2 of the 15 boys favoured the use of diagrams in studying, as opposed to 17 of the 57 girls. As the use of diagrams in language learning may be seen as somewhat limited in comparison to science subjects, for example, and as listening skills are such an important basis for language learning, this may explain a preference for the use of tape recordings. However, it does not explain the importance of visual aids to the girls in the survey.

QUESTION SIX: SELF-ESTEEM

Self-confidence is perhaps the most important factor for many foreign language learners, particularly for adolescents, who may feel particularly self-conscious during what is a very sensitive stage of development. Retention rates for languages in comparison with other subject areas in the college where the survey was carried out were not favourable, and able linguists often dropped out through a lack of confidence in oral work. Graham's study of A level language learners (1997) confirms that anxiety and the question of self-esteem is a gender-related issue, with significantly more females than males in her study indicating that they had difficulty in keeping up with others in their class, even though this was not confirmed by teachers' assessments. This survey seemed to confirm these findings, as fewer

girls than boys in the study were willing to associate their success with ability. Approximately 53% of boys had the confidence to rate their ability as a more important factor, selecting scores 1 and 2, compared to only 33% of girls, many of whom were more willing to attribute their success to hard work alone.

QUESTION SEVEN: ORAL WORK

Greater self-confidence in the languages classroom may lead to longer and more frequent oral contributions. Browne (1996) notes that girls speak more tentatively, have a greater need for approval and take longer to become involved in discussions. In preparation for A level oral exams, and even in day-to-day class debates, anecdotal evidence indicates the disinclination of female students to contribute spontaneously. Often due to their desire to do well, some female students feel they need to script their contributions in order to improve their chances of success. Yet, perversely, this conscientiousness can be a barrier to effective communication in a foreign language, where rapid responses are necessary to keep a conversation going. Boys seem much more self-reliant in this respect, tending to follow their own instincts, sometimes even under-preparing material due to an over-confidence in their oral abilities. Of all the survey questions, this one and question 8 revealed on average the greatest gender divide, with responses following the 'expected' pattern. Despite teaching methods designed to overcome lack of confidence in this skill area, including largely pair and group oral work, almost 37% of girls, selecting scores 4 and 5 (and 26% of boys) expressed an inclination towards selfconsciousness and a desire to prepare fully in advance before making an oral contribution. Twothirds of the boys were happy to speak spontaneously, choosing scores 1 and 2, compared to 44% of girls.

QUESTION EIGHT: ASKING QUESTIONS IN CLASS

Gender differences in language use have been well documented. Browne (1996) notes some of the features said to characterise women's speech: a higher frequency of tentative and apologetic comments such as "Is it possible..?"; "I was just wondering if.."; and a tendency to use language to maintain social interactions and keep conversations going rather than to interrupt. A key issue for all teachers is the amount of time they accord to individual students, and for languages teachers this is even more important, as oral fluency is built up only through interaction and often the whole-class situation inhibits many more introverted learners. The experience of the teacher researching this group led her to believe that there was a greater tendency among boys to enjoy dominating whole-class attention. Boys'

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44 Language Learning Journal

confidence about asking questions when appropriate or even about interrupting the teacher was again confirmed by the findings of the questionnaire. 57% of girls were happy to choose boxes 1 and 2 to demonstrate their willingness to ask questions in class compared to 86.7% boys. Only one boy admitted to some self-consciousness about asking a question in class, as opposed to 11 of the 57 girls. Clearly this is an important issue for teachers to be aware of, as there may be many girls who prefer to misunderstand in silence rather than admit ignorance, whereas it seems that males are more likely to sort out any confusion for themselves, rather than be unsure.

QUESTION NINE: PAIR AND GROUP WORK

Pair and group work is now an important feature of most modern languages classrooms. Place (1997) notes that girls are often more co-operative and less competitive than boys. Browne (1996) also comments that girls use language to draw out and include others, while boys tend to use language to vie for status (also confirmed by research by Tannen, 1992). When it comes to group tasks at A level, preparing arguments for a debate or presentation or taking part in role-plays, we might thus expect girls to prefer group work and do better in it than boys, although boys might find the competitive element of a debate to be motivating. It is difficult to draw any conclusions from the results of Question 9 in the survey, as preferences for group and individual work were fairly evenly spread amongst both girls and boys, with almost half the girls surveyed expressing preference for neither.

QUESTION TEN: PRESENTATION OF WRITTEN WORK

Place (1997), drawing attention to girls' organisational skills, states that there is a common view that girls' exercise books and folders are better presented, and that girls are more conscientious, spending longer on homework and being more meticulous when it comes to detail. The survey results also indicate a gender divide over this issue, with nearly 65% of girls describing their files as organised, selecting scores 4 and 5, as opposed to 40% of boys. Only 28% of the girls admit to having messy files, scores 1 and 2, as opposed to 46.7% of boys. These organisational and presentational skills do seem to be an advantage for girls for some types of work, particularly the increased use of continuous assessment and project work in GCSE and A level courses. The reasons for these apparent differences are more difficult to ascertain, and may relate back to the arguments about the social conditioning of children.

SKILL PREFERENCE

Finally, turning to the popularity of different activities, the students in the survey were asked to rate speaking, reading, listening, writing and grammar work in order of preference. Of the ten elements chosen for the guestionnaire two of the three showing the greatest gender difference related to speaking: boys, it seems, were more confident about speaking the foreign language spontaneously and about asking for clarification, both features of language learning associated with greater self-confidence. The popularity ratings of the different skill areas supported these earlier comments in that speaking polled the highest number of top scores amongst the boys. Speaking, whether in a foreign language or the mother tongue is certainly related to issues of anxiety and confidence. With greater confidence in this area, it seems that the boys in the sample experienced greater enjoyment of this activity.

Browne (1996) reports that more boys than girls experience difficulties with reading and writing and that girls seem to read more books and produce longer pieces of writing than do boys in the early classroom years. The results of the survey confirmed this pattern of preferences for girls, who most frequently chose reading as their favourite language activity, with writing a close second. The more reflective nature of these activities seems to appeal to the girls. Writing also proved a second favourite with the boys in the sample, but the numbers of boys completing this part of the questionnaire was so low that it would be dangerous to form any real conclusions here. The interest of girls in producing well-presented files is also consistent with the pattern of girls' enjoyment of writing.

Perhaps the most surprising response to the rating of activities was the girls' dislike of listening: 17 girls chose listening as their least favourite skill. Traditionally, women have perhaps been seen as more passive, sympathetic listeners, the ones who listen in the classroom rather than feeling the need to dominate proceedings. The response here may be in part due to the difficulty of adjusting to the demands of A level listening activities, which involve listening to broadcast speech in the foreign language and giving responses in exercises which often require grammatical knowledge and language manipulation as much as straightforward comprehension. The challenge of these tasks and the requirement to produce answers under timed conditions may be something that is more appealing to the boys. The girls in the survey also expressed a notable dislike of grammar, which may conflict with the wish to impress in written tasks. Again, the demands of the A level syllabus in comparison with GCSE work may account for some of this dislike, as many students are coming to terms with grammatical structures for the first time.

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Contrary to expectations, the logical patterns of language were not particularly interesting for the boys in the sample either.

CONCLUSIONS

Despite the very limited scope of the research, there appear from the study to be four main genderrelated characteristics which confirm the findings of writers on the gender divide in language learning:

- a male willingness to take risks;
- a male willingness to speak spontaneously in the foreign language;
- a greater male self confidence about asking questions of the teacher to aid their own understanding; and
- the female students' interest in reading and presenting well-organised written work.

If there were conclusive proof that such differences were gender-related, there would certainly be a strong case for the division of the sexes for language classes, as mentioned above. In this way, male and female weaknesses could perhaps receive greater attention from class teachers, so that females might become more self-confident in speaking and males could be encouraged to develop a more organized approach.

However, it is interesting to note that although features were deliberately chosen that would be most divisive, and "typically" male answers were placed on the left-hand side and female answers on the right, answers on every questionnaire covered the whole range. It seems that, although some male or female tendencies may exist, more significant differences relate to individual characteristics than to the gender divide. It is perhaps more fruitful therefore for teachers to be aware of their pupils' individual strengths and weaknesses than to attempt to deal with gender-

related issues, which may bring with them the danger of stereotyping. This small-scale study has indeed found little evidence to support some of the main assumptions about the gender divide in relation to fanguage learning, which suggests that effective teaching for this group should involve recognising and encouraging students to work on improving individual weaknesses in order to enhance the development of foreign language skills.

REFERENCES

- Barton, A. (1996), Words of comfort for males. Times Educational Supplement, Modern Languages Extra, March 22, p X.
- Brown, H. D. (1994) Principles of Language Learning and Teaching. Third Edition, Englewood Cliffs, New Jersey: Prentice Hall.
- Browne, A. (1996) Developing Language and Literacy. London: Paul Chapman.
- Callaghan, M. (1998) An investigation into the cause of boys' underachievement in French. *Language Learning Journal*, 17, 2-7.
- Clark, A. (1998) Gender on the Agenda: Factors Motivating Boys and Girls in MFL. London: CILT.
- Graham, S. (1997) Effective Language Learning. Clevedon: Multilingual Matters.
- Loulidi, R. (1990) Is language learning really a female business? Language Learning Journal, 1, 40-43.
- Maccoby, E. and Jacklin, C. (1975) The Psychology of Sex Differences, Stanford: Stanford University Press.
- Oxford, R. (1994) La différence continue.... Gender differences in second/foreign language learning styles and strategies. In Jane Sunderland (ed) Exploring Gender: Questions and Implications for English Language Education. London: Prentice Hall.
- Place, D. (1997) "Boys will be boys": boys and underachievement in MFL. Language Learning Journal, 16, 2.
- Pritchard, R. (1987) Boys' and girls' attitudes towards French and German. *Educational Research*, 29, 1, 65-71.
- Swann, J. (1992) Girls, Boys and Language. Oxford: Blackwell.
- Tannen, D. (1992) You Just Don't Understand: Women and Men in Conversation. London: Virago.

"It seems that, although some male or female tendencies may exist, more significant differences relate to individual characteristics than to the gender divide"

Appendix A

What kind of learner are you?

Please indicate on the scales below which statements best describe you. Boxes 1 and 5 indicate that the nearest sentence describes you or your views very well. Boxes 2 and 4 indicate that you might use these statements to describe yourself some of the time and box 3 indicates that you prefer neither statement.

Name		lam	male
Language			female
	1 2 3 4 5		
If I have a large amount of new material to learn, I like to take things one step at a time.		I don't mind being information at once see the whole pict	e, because I like to
I like to be presented with rules for grammar, which I can then apply logically in my own work.		I like to spot patter work out grammati I like to use my ow	cal rules for myself.
I like to have clear-cut answers to questions and dislike exceptions a rule.		l like to discuss differ rather than being of	erent possibilities given one set answer.
I don't mind guessing an answer a question if it's quicker than working it out and I've a good chance of being right.	to	I always consider a giving my answer.	all the options before
I learn more when I draw diagram while I study.	ms	l sometimes listen t study.	o tapes to help me
6. I have done well at school becauding of my ability.	use	I have done well at work hard.	school because I
7. I don't mind speaking spontaneously in French/German	n	I always feel self-conspeak French/Gerrexactly what to say	nan. I like to prepare
8. If I haven't understood something in class, I always ask the teacher	! !	I don't like to ask qu case it makes me lo	
9. I like to work on my own.		I learn more when	I work in groups.
10. My file tends to be a bit messy.		I keep my notes or presented.	ganized and well
Please rate the following activities ac 5 your least favourite.	ccording to your preference o	on a scale of 1 - 5. 1 inc	dicates your favourite activity,
Speaking Reading	Grammar work	Listening	Writing