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Identifying possible causes for high and low retention rates in language and culture programs at the Australian National University: A characterization of three groups of students crucial for understanding student attrition

Abstract

In this contribution we summarise the main results of a student retention and attrition study carried out at Australian National University in 2008–2009. We focus on a crucial finding of the study, namely that the dichotomy continuing/discontinuing to classify students needs to be reconceptualised. Three very different groups of students are identified: (1) Continuing students who indicated that they had not considered seriously the possibility of discontinuing, (2) Continuing students who indicated that they had seriously considered the possibility of discontinuing (but had continued nevertheless), and (3) Students who had discontinued their language and culture studies. The second group is analogous to the ‘at risk’ group conceptualised in other student attrition studies. Conclusions for future retention and attrition studies are presented.
1. Introduction

The study reported on in this contribution was undertaken at the Australian National University (ANU) in response to concerns about apparent high attrition rates in language and culture courses. The project aimed at identifying possible underlying causes for low retention rates with a view to seeking targeted solutions, where these are feasible. The project was a collaborative undertaking by all of the ANU’s language and culture programs and internally funded. Following a one-year pilot phase, data for the full study were collected between May and September 2009. Preliminary results of the project have been presented at various conferences (Jansen et al. 2011; Jansen and Martin 2011; Jansen, Martin and Åkerlind 2009; Jansen et al. 2009; Martin and Jansen 2011). A full report on the project is currently being finalized.

Following a brief overview of previous research, this contribution presents a key feature of the full study related to language retention and attrition. It focuses on interpreting the results of the statistical analyses undertaken to characterise three groups of students. These are committed language students, students who are still studying languages but had been thinking of discontinuing, and those who had actually discontinued their language and culture studies. We consider this characterisation crucial to understanding the situation of retention and attrition in language and culture programs, as it moves the conceptualisation of language attrition away from the continued/discontinued language study dichotomy. Reasons of space preclude the consideration of motivation to study languages, but this aspect of language learning is addressed in the full report of the project.

2. Findings from recent studies in language attrition

Unlike attrition of university study in general (see for example James 2001; Taylor and Bedford 2004; and DEST 2004), the problem of attrition in Australian university language and culture courses has not until recently been studied systematically.

A first, unpublished study was a review of the Diploma in Modern Languages (DML) at The University of Melbourne (Roever and Duffy 2005), for which an overall discontinuation rate of around 60% had been established. The study investigated six languages (French, German, Italian, Chinese, Japanese and Indonesian) by interviewing 13 staff and 50 current and past students individually, using semi-structured interview guides. With respect to discontinuation, this was found to be most prevalent in the earlier stages of study. Seven reasons were found for students’ deciding to discontinue their language study. The most frequent of these involved problems with high ‘workload’, ‘wrong placement level’, and ‘personal’ reasons of various kinds.

Two Australia-wide studies on beginner language courses were conducted by the Australian Academy of the Humanities and documented in two reports: LASP
(Nettelbeck et al. 2007) and LASP 2 (Nettelbeck et al. 2009). Both had specific sections on retention and attrition in language and culture programs.

The LASP 1 study sought to provide: (a) an overview and understanding of beginner courses in languages and cultures Australia-wide; and (b) best practice in these courses in a range of educational exponents. The latter involved a more detailed study of 10 universities and at least 10 languages and cultures. The study used a multi-method approach, including questionnaires, classroom observations and interviews. Unlike LASP 2, this first study involved staff ‘interlocutors’, rather than students as informants.

With respect to the question of retention and attrition, which is our concern here, data were collected longitudinally over five semesters, from two cohorts: the first starting in 2005 and the second starting in 2006. The study found that for the first cohort, retention from beginning to third year level was on average only 25%, with a very similar pattern for the second cohort (Nettelbeck et al. 2007: 14). Retention rates were found to vary considerably, among institutions, as well as within them. The following four reasons for low retention rates transpired from comments solicited from the participating universities’ interlocutors (Nettelbeck et al. 2007: 15): Many students were seen to:

- start a language as an elective in a later year;
- have problems with the heavy workload;
- be frustrated with their slow progress;
- experience time-tabling problems.

With respect to the first reason, the report stresses that “even a single semester of experience of learning a new language is not a waste of time” for a number of reasons, including the need for “life-developing experience such as travel” and “learning about other linguistic systems and the cultures that nourish them.” (Nettelbeck et al. 2007: 16). With reference to future studies, the report recommends that “a large-scale national study of retention and attrition should also be undertaken immediately”. This recommendation was realized in LASP 2, which was essentially a follow-up study of LASP 1, involving the same 10 universities, plus an additional one.

LASP 2 (Nettelbeck et al. 2009) was intended as a semi-longitudinal student survey involving two hard-copy questionnaires to explore retention strategies and the use of technology enhanced language learning. As in the case of LASP 1, the study was restricted to beginning students. Regarding retention and attrition, the first questionnaire, which was administered in first semester 2008, obtained 2,968 responses to 14 mostly pre-determined questions regarding students’ academic profile, their language background, intended length of study and motivations. The second questionnaire, administered in second semester, 2008, obtained 1,810 responses. This second survey aimed at a longitudinal dimension, which, however, could not be formally realized, since student identity was not controlled for.
The main conclusions drawn from the study are various. Four of these identify potential problem areas related to the exploration of student attrition, namely:

- **Late enrolment**: 50% of students were found to be starting a language later than in their first year of study. This is seen as a significant contributing factor to attrition. With reference to the LASP 1 report, short(er)-term language study in itself is, however, not seen as negative, but requiring attention in course planning and design. Note that in the remainder of this contribution we refer to this group as ‘late starters’.

- **Mixed proficiency cohorts**: Only 38% of beginner students were found to have no previous background in the language, the others having a range of previous experiences, including a “not insignificant number” of students who had successfully completed year 12”. (Nettelbeck et al. 2009: 12). By the same token, 50% of beginner students of Japanese and Korean indicated that they were native speakers of Chinese. The report regards mixed proficiency as problematic, because it creates ‘perceptions of disadvantage’ affecting student motivation.

- **Workload perceptions**: ‘many’ students were found to be experiencing the workload as higher than expected (Nettelbeck et al. 2009: 19).

- **Attrition does not appear to be caused by perceived quality of teaching**: The results from the question about changed intentions in the second survey indicate that almost twice as many students (= around 266 students) intended to study the language for longer, rather than shorter than was their original intention. As the reasons for this were stated overwhelmingly as the course being ‘more interesting’ and/or the teaching being ‘better’ than expected (rather than ‘less work than expected’ or other reasons) the conclusion is drawn that “high attrition does not appear to be caused (and may in fact be mitigated) by perceived quality of teaching or course interest.” (Nettelbeck et al. 2009: 19).

The LASP 2 data were collected in the same year as those of the full study at the ANU, which we present in this contribution. The ANU researchers sought to complement the wider study in a number of respects. Because it focused on only one university, it was possible to widen the range of students and study these in greater depth. Specifically:

- The ANU study took a cross-sectional approach, including all levels of language study, rather than studying the beginner level only.
- It targeted not only enrolled students, but also those who had discontinued.
- The questionnaire was much more detailed (well over one hundred questions, as opposed to fourteen in the LASP 2 study).
- The study identified students who had seriously thought of discontinuing but actually had continued, and their reasons for doing so.
- It identified reasons why students were continuing with their language study, that is, what motivated students to continue.
- It undertook a more in-depth statistical analyses of the data.
University-internal statistics were used to complement the information questionnaire.

Following a brief description of the findings of the pilot study at ANU, we will concentrate on describing the three groups identified by the full study.

3. Preliminary findings from the 2008 ANU retention and attrition pilot study

Data collected during the pilot phase of the ANU study included an online survey with 254 responses from students who had enrolled in a beginner course in 2007 and who were either continuing or had discontinued their language and culture study in 2008. Using descriptive statistics, comparison of means, correlations and other conventional statistical methods, the two groups were compared with respect to: (a) their language background; (b) their reasons for enrolling in an *ab-initio* course; (c) their experiences of language study and outcomes; and (d) their reasons for continuing or possibly discontinuing or their reasons for having discontinued their language study. While some differences did emerge, the comparison found overall a surprising lack of differences between the two groups with respect to the core characteristics investigated, i.e. students’ backgrounds, reasons for enrolling and learning experiences and outcomes. Among the few differences that did emerge, were that discontinuing students appeared: (a) to commence their language study later than continuing students; and (b) not to study the language as a compulsory component in their degree. While the former connects to one of the key findings in LASP 2 (i.e. late enrolment), the latter was not investigated in the LASP studies.

With respect to reasons for discontinuing, the analysis identified 12 reasons as most important. While none of these stood out as singularly important, a strong correlation (60% or more) was found between nine of these, which were summarised collectively as “performing unexpectedly poorly in the course”. Some of these are the same or similar to those identified in the LASP studies:

- Not being satisfied with progress;
- Expectations not being met;
- Not enjoying the course content;
- Not liking the way the course was taught;
- Finding the course too difficult;
- Finding the workload too high;
- Not receiving good grades;
- Falling behind in one’s grades and unable to catch up; and
- Feeling that other students in the class speak the language better.

With respect to the 14 pre-determined reasons for continuing, eight were found to be consistently regarded as important. Topping the list (more than 80% of the responses) were:
• I think knowing more than one language is important;
• I enjoy learning the language; and
• I feel that I’m progressing well.

Other reasons cited which had agreement in more than 65% of the responses were:
• I like the way the language is taught;
• It would be a shame to give up at this stage;
• I like the learning materials;
• I get good marks/grades; and
• The workload is manageable.

In the context of a study on motivation and retention in Australian university students of German Studies, Jansen and Schmidt (2011) undertook a factor analysis of the data from the full ANU study pertaining to reasons for ‘discontinuing’ (discontinued students) and ‘thinking about discontinuing’ (continuing students). The analysis identified four underlying factors, weighted equally: (1) ‘having difficulties with language learning; (2) ‘negative learning experiences, often contrary to expectation; (3) ‘practical, external reasons; and (4) ‘affective reasons’. An analysis of reasons for continuing was not undertaken in the context of this study. The study also presented results from an Australia-wide study on student motivation, however these involved a different data-set which focused on students of German Studies only (for the latter see also Schmidt 2011).

In conclusion, while Jansen and Schmidt (2011) found similarities between a subgroup of continuing students and discontinuing students, the pilot study found some differences between the students who continued language studies and those who had chosen to discontinue language studies, the overall picture was that the groups differed little in statistical terms. This called for further data collection, and a more sophisticated statistical approach in analysing the data.

4. The full 2009 ANU retention and attrition study: methodology

The full ANU study commenced in 2009. As did the pilot study, the full ANU follow-up study aimed at investigating retention and attrition in language and culture programs at the ANU and placing the results in the context of language retention and attrition at Australian universities.

Specifically, the study aimed at exploring reasons for:
• studying a language at the ANU;
• continuing language study at the ANU;
• thinking about discontinuing or deferring language study at the ANU; and
• discontinuing language study at the ANU.
4.1 Subjects and response rates

The students targeted were all enrolled in a beginner or later-year language and culture course in first semester, 2009 (at the HECS census date). The study also targeted students who had been enrolled in a language and culture course in first semester, 2008, but who had discontinued language study. A total of 1321 students were surveyed, specifically: 432 who were enrolled in a beginner course; 530 who were in a continuing or more advanced course and 321 who had discontinued their language study. 38 responses were excluded from the analyses, because they were invalid or incomplete. The response rates, calculated over the total number of students enrolled were for:

- Beginning students 51%
- Continuing students 38%
- Discontinued students 31%

4.2 Instrumentation

An extensive questionnaire, expanding the pilot study questionnaire, was developed and implemented online, using Apollo© software. The questions were mostly pre-determined, some with open options for further specification. There were three versions of the questionnaire: One for beginning students (with 110 questions), one for post beginners (with 125 questions), and one for discontinued students (with 111 questions). Most questions required answers on a 5-point scale, for example: ‘not at all important’; ‘not very important’; ‘of some importance’; ‘very important’, and ‘extremely important’.

The questionnaire contained four or five main sections: All versions were essentially identical with respect to the first four sections: (1) Background information; (2) Reasons for studying the language; (3) Experience of language study; (4) Reasons for discontinuing, or thinking about discontinuing. The questionnaire for post-beginner continuing students had an additional section: (5) Reasons for continuing.

4.3 Data collection

The data for the full study were collected online between May and September 2009. Subjects were recruited via in-class announcements, supported by online postings, with follow-up reminders via email. Where possible, the questionnaires were filled out during a class in a computer lab. Follow-up emails were sent to students via their ANU email addresses, ‘reminding’ those who had not yet participated that they could still do so. Discontinued students were recruited via email throughout. Continuing students were also encouraged to contact former fellow students who had discontinued language studies. I-Pods and book vouchers to be won were offered to all participating students as incentives.
4.4 Data analysis

As in the case of the pilot study, conventional statistical methods were used initially to try to find significant differences between continuing and discontinuing students. The bigger sample allowed for finding more differences, but a clear overall picture that differentiated the two groups could not be found. We therefore explored several ways of basing the analysis on a classification that would go beyond the basic dichotomy of continuing/discontinuing. Using the qualitative descriptions of the reasons student gave in the open-ended sections of the survey for having continued or discontinued their language studies, a new classification was explored and tested statistically. This new classification was based on students’ commitment to language study, and their circumstances, as shown in Table 1.

Table 1: Classification of students’ commitment to language study

<table>
<thead>
<tr>
<th>Commitment to language studies</th>
<th>Continuing Students</th>
<th>Discontinuing Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Did not consider discontinuing</td>
<td>Wanted to continue, but had no choice but to discontinue</td>
</tr>
<tr>
<td>Low</td>
<td>Seriously thought of discontinuing but continued (or had to continue)</td>
<td>Thought of discontinuing and discontinued</td>
</tr>
</tbody>
</table>

The data exploration showed that meaningful statistical results could be found with a subset of the data where such a classification could be asserted from the qualitative data. In particular, a Canonical Discriminant Analysis of the resulting classification was carried out that showed very promising results. Unfortunately, the low number of students who belonged to the category of high commitment but who had no choice but to discontinue forced us to collapse the discontinuing students into one group. Then a Discriminant Function Analysis was used to explore the sample according to the following three-way classification:

- Continuing, not thinking of discontinuing (*Committed*)
- Continuing, thinking of discontinuing (*Doubters*)
- Discontinued (*Quitters* – including both low and high commitment to language studies)

The names in italics are the shorthand names used to refer to these groups in the remainder of the contribution.

A total of 106 independent variables were checked for their degree of statistical association with propensity to discontinue, i.e. the variable used to classify the data into the three groups above. Based on the ANOVA function output the model determined 79 variables significant in the analysis. The significance was based on the Wilk’s Lambda value and its significance. Hence, only the variables with significant Wilk Lambda were considered for the final Discriminant Function Analysis and remaining variables were dropped from the analysis.
4.5 The ANU setting

The study surveyed 21 Asian, European, Middle-Eastern and Classical languages taught at ANU in 2009, namely:

| Arabic      | Italian      | Spanish    |
| Cantonese   | Japanese     | Vietnamese |
| Classical Greek | Korean     | Thai       |
| French      | Latin        | Tetum      |
| German      | Mandarin     | Turkish    |
| Hindi       | Persian      | Russian    |
| Indonesian  | Sanskrit     | Urdu       |

As in the case of the LASP 2 study, retention rates varied according to languages. The overall ANU-wide real retention rate from 2008 to 2009 was 54% (that is, 46% of students who were enrolled in a language course in 2008 were not enrolled in language studies in 2009).

The analysis of enrolment data in 2009 showed that 9.6% of the total ANU student load corresponded to language courses, and that 10.5% of the first year student load corresponded to language courses. When compared with the figures provided in LASP 1, this puts ANU in the upper half of universities surveyed by Nettlebeck et al. (2007: 11). In 2009, 36% of the language load was composed of students enrolled in beginner language courses, which, when compared again with the figures provided in LASP 1, places ANU among the minority of institutions where beginner courses do not constitute more than 50% of enrolments.

When students were classified as students commencing an ANU degree in 2009 and students continuing an ANU degree in 2009, as shown in Table 2, it was found that 30.1% of the first year language load was composed of students who were already studying at ANU. These are the students referred to as ‘late starters’ above. The figure also shows that 21.5% of the commencing language student load is composed of students who enrol directly in later year courses, that is, students whose knowledge of the language they study allows them to start at a post-beginner course.
Table 2: Language enrolments in 2009 discriminated by level and commencing/continuing status. Source: ANU Statistical Unit (Load_2009 Pivot Table)

<table>
<thead>
<tr>
<th>Level</th>
<th>Commencing ANU degree</th>
<th>Continuing ANU degree</th>
<th>Total</th>
<th>Percent Commencing</th>
<th>Percent Continuing</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Languages</td>
<td>202.1</td>
<td>87.1</td>
<td>289.3</td>
<td>69.9%</td>
<td>30.1%</td>
</tr>
<tr>
<td>Later Year Languages</td>
<td>109.4</td>
<td>399.9</td>
<td>509.3</td>
<td>21.5%</td>
<td>78.5%</td>
</tr>
<tr>
<td>Total Languages Load</td>
<td>311.5</td>
<td>487.0</td>
<td>798.5</td>
<td>39.0%</td>
<td>61.0%</td>
</tr>
<tr>
<td>First Year ANU Load</td>
<td>2,118.6</td>
<td>687.4</td>
<td>2,806.0</td>
<td>75.5%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Later Year ANU Load</td>
<td>574.4</td>
<td>4,962.0</td>
<td>5,536.4</td>
<td>10.4%</td>
<td>89.6%</td>
</tr>
<tr>
<td>Total ANU Load</td>
<td>2,693.0</td>
<td>5,649.4</td>
<td>8,342.4</td>
<td>32.3%</td>
<td>67.7%</td>
</tr>
</tbody>
</table>

Percent of Languages in First Year Load 9.5% 12.7% 10.3%
Percent of Languages in Later Year Load 19.0% 8.1% 9.2%
Percentage of Languages at ANU 11.57% 8.62% 9.57%

All enrolment figures are given in EFTSLs (Equivalent Full-Time Student Load). Usually 1 EFTSL = 8 students

5. The 2009 full ANU retention and attrition study: An overall quantitative analysis of the data

The main purpose of this section is to characterize the three groups identified in the Canonical Discriminant Analysis, by exploring how these groups differ from each other when several background, attitudinal and education variables are considered. The variables we consider in this contribution involve general basic characteristics, the degree of freedom in students’ studies, their perceptions about being forced to study or discontinue a language, students’ previous exposure to languages, perceptions of difficulty of language study, sense of progress, perceptions of workload, teachers and the learning environment, and finally the effects of students’ grades/marks. A detailed analysis of each of these variables can be found in the appendix. Due to space constraints we have left out from consideration in this contribution a range of variables related to the reasons for learning languages, as well as the variables that only differentiate between two of the three groups. We have also omitted a detailed presentation and discussion of the statistical significance of the variables under consideration. All this information will be available in the full report of the project.

We will begin by exploring basic student characteristics.
Table 3: Cross-tabulation of level of language study in 2009 and propensity to discontinuation

<table>
<thead>
<tr>
<th>Nickname</th>
<th>Name on graphics</th>
<th>Beginner -2009</th>
<th>Post-beginner -2009</th>
<th>Discontinued -2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response</td>
<td>No response or not applicable</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Committed</td>
<td>Did not think of discontinuing and</td>
<td>318</td>
<td>298</td>
<td>0</td>
<td>616</td>
</tr>
<tr>
<td></td>
<td>continued</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doubters</td>
<td>Thought of discontinuing but continued</td>
<td>111</td>
<td>212</td>
<td>0</td>
<td>323</td>
</tr>
<tr>
<td>Quitters</td>
<td>Discontinued</td>
<td>0</td>
<td>0</td>
<td>321</td>
<td>321</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>432</td>
<td>520</td>
<td>321</td>
<td>1273</td>
</tr>
</tbody>
</table>

Table 3 shows how the sample data is distributed when the three characteristics are cross-tabulated with the level of language study at which students were at the time of the data collection. The two important facts seen in the table are that the number of beginning students who declare themselves committed to language studies is much higher than those who doubt if they will continue. Still, 25% of beginning students already doubt if they will continue in their first semester of language studies. This corresponds to Nettelbeck et al.’s (2009: 13) Australia-wide finding that 25% of beginning students declared that they intend to study a language for only one or two semesters. The proportion is even higher (40%) for students who are in the second or subsequent years of language studies, something not explored by Nettelbeck et al. (2009) because their study was confined to beginning students. The table does not give us any information on students who discontinued their studies. To learn more about them, and the other two groups, we have to consider the outcome of a more detailed analysis, as presented in Figures 1-11 in the Appendix. Based on this analysis, we have been able to characterise each of the three groups, first on the basis of their most prominent characteristics (i.e. those found to be prominent and unique to one group when compared to the other two) and then considering additional relevant characteristics to contribute to a fuller, more rounded characterisation.

**Committed students**: In this group we find students who said they never seriously thought about discontinuing their language studies. These are what language teachers usually consider their ‘ideal’ students; they are their best learners, self-motivated, appreciative, yet discerning, and perceiving their past and present language learning as rewarding. Their most prominent characteristics are:
• They would have chosen to study a language regardless of whether this is compulsory or not in their degrees.
• They perceive teachers’ skills, feedback, approachability and availability, as well as the teaching materials and the language learning environment in general as better than expected.
• They find that the support they receive from fellow students is right or better than expected.
• They are satisfied with their progress in language learning.
• They report that they have learned more than expected about the culture(s) of the language studied and the writing system of the language.
• They get higher marks and rate concerns about getting bad marks as more important than the other groups.
• They are concerned when language classes are too big.

Compared with the other two groups, Committed students show the following additional characteristics:

• They rate their previous experiences of language learning as rewarding.
• Their expectations about the degree of difficulty of learning a language were more realistic than those of the other groups; most of them perceive this as expected, or even less than expected. The same can be said for the difficulty of learning grammar in particular.
• The level of language knowledge in their families and peer group is higher than for the other groups. They are more likely to have a family background in the language they are studying, or to have studied the language previously. They also consider it important to continue studying the language when they have previously spent time in the country where the language they study is spoken.
• They are more likely to be international students.

Quitters: In this group we have students who have already discontinued language studies. We already know from the pilot study that this is a mixed group of students, including students who may have wanted to continue their language study, but had to discontinue because they had no other choice, and students who voluntarily discontinued, because they chose to complete a major in another discipline or because they were dissatisfied with their language learning experience. Their most prominent characteristics are:

• They are more advanced in their undergraduate degree, or have completed their degree.
• They are older of age.
• Language study is not compulsory for their degree and they are freer to choose whether or not to study a language.
They consider it extremely important that people discouraged them from studying the language.
They consider other study commitments more important than language studies.

Compared with the other two groups, Quitters show the following additional characteristics:

• They get lower marks than the other two groups, but rate concerns about getting bad marks as less important than for the other groups.
• They consistently rate teachers’ skills, feedback, approachability and availability, as well as the teaching materials and the language learning environment in general, as lower than the other two groups.

Doubters: In this group we find the students who reported that they had seriously considered discontinuing language studies, but were still enrolled in a language course at the time that the survey was administered. Typically, these are the students who struggle with their language study and who have either not studied a language before or they feel that they did not get much out of the experience. Their outstanding characteristics are:

• They find the workload of learning a language too high.
• They are not satisfied with their progress in language learning.
• They perceive that they have fallen behind in their study and cannot catch up.
• They feel that the fact that their friends are discontinuing language studies is very important for considering discontinuation.

Compared with the other two groups, Doubters show the following characteristics:

• They are less likely to have studied the language before.
• When they have studied a language before, they rate their previous experiences of language learning as less rewarding than the other two groups.
• They perceive that the degree of difficulty of learning a language is higher than expected. The same can be said about the difficulty of learning grammar in particular.
• The level of language knowledge in their families and peer group is lower than for the other groups. They are less likely to have a family background in the language they are studying, or to have studied the language previously. They feel less encouragement from their family to study languages.
• They are less likely than the other two groups to feel that they have freedom to choose whether or not to study a language. They are also more uncertain than the other two groups when asked if they would have chosen to study a language regardless of whether or not this is compulsory in their degrees.
• A significant proportion of them (25%) considered it extremely important that people discouraged them from study languages, but this proportion is lower than for Quitters (almost 40%).

• They receive lower marks than Committed students, and only slightly higher marks than Quitters, but while Doubters rate their concern about receiving poor marks as less important than Committed students, they are more likely to perceive this as important than Quitters.

6. A possible overall interpretation of the data

Our previous characterization of the three groups allows us to identify among the students who were studying languages at ANU in 2009 two different groups, one of which, the Doubters, are analogous to the ‘at risk’ group found in general attrition studies of the first year experience (cf. McInnes 2001). Such students are likely to discontinue language studies, unless compulsion to study a language in their degree or external pressures, i.e. from family or work prevent them from doing so. These are also the students who are more likely to be sensitive to mixed proficiency groups, high workload, or pressures to discontinue language study (for example, from the English-dominant Australian language contexts or from advising academics who do not value language studies).

Following Bourdieu (1977, 1991) we hypothesize that the idea of students entering university with a certain amount of ‘language capital’ could be useful to characterise the groups. Bourdieu (1991: 76) argues that “all speech is produced for and through the market to which it owes its existence and its most specific properties.” In our context the speech or writing produced by students in a second language will be evaluated in the market of university language studies. And those endowed with more language capital will be able to obtain more profit (higher marks) and more opportunities (scholarships to study abroad, invitations to do honours, etc.). In our interpretation, students who speak a language other than English (LOTE) at home or have a partner that speaks a LOTE will have more language capital than those who speak only English; students who have parents who have learnt foreign languages, travel abroad or are in constant contact with native speakers of the language they study will have more language capital than those who have monolingual English-speaking parents, never travelled to a non-English-speaking country or have primarily contact with monolingual English speakers; students who had a good experience of language learning prior entering university or have been exchange students to a non-English-speaking country will have more language capital than those who had no or frustrating exposure to language learning and have not been exchange students; students who began to study as beginners a cognate language of a language that they have studied before (e.g. students who start to learn Spanish when they know French) will have more language capital than students who began to study a language without previous exposure to language studies or a cognate language; and so on.
Using this construct, the amount of language capital brought in when entering university will be the crucial difference between Committed students and Doubters. Quitters will lie between them, mainly because the category of Quitters itself is composed of students of high and low language capital. We do not have enough data to be able to explore how much the language capital affects the two subgroups of the Quitters that we have postulated. However, this is an important issue which should be addressed in further studies.

The two other most important factors that characterize the data as a whole are the issue of late starters and the issue of compulsion of language studies. The former is more important for the Quitters, and our data clearly shows this. The second is more important for the Doubters. However, as Table 4 shows, there are still 47% of Doubters, for whom language study is not compulsory and 36% of Quitters, who have discontinued despite having been required to study a language (see also the description of Fig. 2a in the Appendix).

Table 4: Cross-tabulation of compulsion to study languages in student’s degree in 2009 and propensity to discontinuation

<table>
<thead>
<tr>
<th>Nickname</th>
<th>Name on graphics</th>
<th>Does your degree require compulsory language study?</th>
<th>Percentage yes</th>
<th>Percentage no</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response</td>
<td>No response or not applicable</td>
<td>Yes: 6   No: 5   Total: 11</td>
<td>54.5%</td>
<td>45.5%</td>
</tr>
<tr>
<td>Committed</td>
<td>Did not think of discontinuing and continued</td>
<td>Yes: 324 No: 287     Total: 611</td>
<td>53.0%</td>
<td>47.0%</td>
</tr>
<tr>
<td>Doubters</td>
<td>Thought of discontinuing but continued</td>
<td>Yes: 168   No: 152     Total: 320</td>
<td>52.5%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Quitters</td>
<td>Discontinued</td>
<td>Yes: 115   No: 203   Total: 318</td>
<td>36.2%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>Yes: 613   No: 647   Total: 1260</td>
<td>48.7%</td>
<td>51.3%</td>
</tr>
</tbody>
</table>

7. Conclusion

We believe that the most significant insights from our study of retention in language and culture studies at ANU are:

- Retention is not only an issue for beginning students; it is crucial at a stage when students need to decide whether or not complete a major, or when they decide whether to go on to honours.
There are three (or possibly four) rather than two groups of students that need to be distinguished to gain a fuller understanding of retention and attrition in university language and culture programs. The reason why we initially found no difference between continuing and discontinuing students in our 2008 pilot study was because these two groups are composed of very different subgroups, each one characterised by students with high and low commitment to language studies.

Any retention policy will not only have to contemplate people who discontinue language studies, it will need to look at the students at risk of discontinuing; these are students who we hypothesize have lower language capital and would require additional help to continue their language studies. In particular, mixed proficiency groups affect Doubters negatively because they perceive that other students have an advantage over them, and see it as a big task to catch up with them. However, the issue of mixed proficiency groups is more complex than presented in Nettelbeck et al. (2009), as they can be reconceptualised using the construct of language capital.

Workload perceptions and quality of teaching and materials are only relevant to particular subgroups of students. In our case the former is relevant predominantly to the Doubters, while the latter is predominantly of importance for the Quitters. Such perceptions should be considered in any language retention policy and matched with student expectations.

Late entry into language study is also a significant factor, which is most prominent among the Quitters. This affects retention rates considerably. Therefore, identifying such students is important in order to avoid the perception that lower retention rates are a direct consequence of the quality of language and culture programs. This should not be an excuse to avoid implementing curriculum design changes to address these students’ needs (as has been pointed out by Nettelbeck et al. 2007, 2009).

Among the most prominent characteristics of Quitters is also the non-compulsory nature of studying languages as part of their degree. More than half of the Doubters were enrolled in degrees which require compulsory language study. Given the needs for language and culture skills in an economically developed country like Australia, increasing compulsory language study will have to be considered as an option by Australian universities. In such case developing the necessary support for students without enough language capital to succeed in university language studies should be a priority.

In summary, the issue of attention and attrition has become a focus of renewed interest in language and culture programs in Australia. To add to the existing knowledge base, in 2008 and 2009 we designed and implemented a two-phase in-depth study of students in all language programs at one university (ANU). By collecting an extensive set of data, and subjecting it to rigorous statistical analyses, we have been able to
provide, in this study, a series of thoroughly researched interpretations. In particular, our findings made clear that a simple dichotomy of continuing versus discontinuing students does not provide a full picture of the retention and attrition profiles of ANU language and culture students. Three (or possibly four) groups of students need to be differentiated when considering retention and attrition in depth. Concentrating on just the Beginner level of language study, while important, is not sufficient if we want to understand all the complexities of retention and attrition issues in language and culture programs. The issue of compulsory language study should also be revised. Australian universities cannot keep graduating monolingual students in areas of studies where these should have a command of a language other than English, just because this is politically difficult.

Notes

1. The names of the reports are acronyms of ARC Linkages — Learned Academies Special Projects scheme under which it was funded.

2. As email was the method of contacting the discontinuing students, we suspect that some of them may not have received the invitation to participate as only ANU email addresses (as opposed to personal email addresses) were disclosed to us. We had, however, no means of estimating how many of them were not using their ANU email after graduation/discontinuation from ANU.

3. The full list of variables and a more detailed explanation of the methodology will be available in the final report of the project.

4. The only exception was the variable that classified the gender of the student, which was considered in the final model because it is a variable that traditionally has been associated with language proficiency.

5. This retention rate includes students who have completed their undergraduate degree in 2008, and was calculated using student enrolment data, that is, it is not the apparent retention rate used when estimating the retention rate by looking at enrolment figures in second year and comparing these with enrolment figures in first year, or comparing in the same fashion second and third year enrolments, as reported in Nettlebeck et al. (2007: 14-15).

6. We are not attempting an over-economic interpretation of language capital, such as those found in Chiswick and Miller (2003) or Pendakur and Pendakur (2002), but a social interpretation of the language learning setting at universities.

References


Appendix: A detailed interpretation of the cross-tabulated variables

Figure 1: Basic Characteristics — Student characteristics
Figure 2: Basic characteristics — Freedom to study languages
How much freedom did you have to choose whether or not you study a language as part of your degree?
- Totally free
- To some extent free
- Not at all free

Propensity to discontinuation

If you had had the choice of not studying a language, would you have chosen to study it anyway?
- No
- Uncertain
- Yes

Propensity to discontinuation
Figure 3: Basic characteristics — Perceptions of being forced to study or to discontinue studying a language

[Diagrams illustrating the impact of forced study or discontinuation on language study.]
Are you currently enrolled in more than one language course at ANU?

Propensity to discontinuation

Other study commitments are more important.

Propensity to discontinuation
Figure 4: Family and peers

I have a family background in this language.
- Extremely important
- Very important
- Of some importance
- Not very important
- Not applicable

Propensity to discontinuation

Knowledge of languages in student’s family
- High
- Medium
- Low
My family encouraged me to study if:
- Extremely important
- Very important
- Of some importance
- Not very important
- Not at all important

Propensity to discontinuation

Knowledge of languages in the student's peer group:
- High
- Medium
- Low

Propensity to discontinuation
Figure 5: Previous exposure to language learning

Have you been an exchange student?
- No
- Yes

Propensity to discontinuation

If you had studied languages before enrolling at University, how would you rate your experience of learning that language?
- Extremely rewarding
- Very rewarding
- Somewhat rewarding
- Not very rewarding
- Not at all rewarding

Propensity to discontinuation
Because I had previously studied the language.

- Extremely important
- Very important
- Of some importance
- Not very important
- Not at all important

Propensity to discontinuation

Because I have previously spent time in a country where the language is spoken.

- Extremely important
- Very important
- Of some importance
- Not very important
- Not at all important

Propensity to discontinuation
Figure 6: Perceptions of difficulty of language studies

![Figure 6](image_url)
Figure 7: Difficulties in the language learning process

(a) I'm not satisfied with my progress.
- Extremely important
- Very important
- Of some importance
- Not very important
- Not at all important

(b) I fell behind in my studies and can't catch up.
- Extremely important
- Very important
- Of some importance
- Not very important
- Not at all important
Figure 8: Perception of Workload in learning the four basic skills
Figure 9: Perception of teachers

(a) Teachers' knowledge (average across teachers).
- Much better than expected
- A little better than expected
- As expected
- A little worse than expected
- Much worse than expected

(b) Advice and feedback from teachers.
- Much better than expected
- A little better than expected
- As expected
- A little worse than expected
- Much worse than expected

Propensity to discontinuation
Propensity to discontinuation

Teachers' teaching skills:
- Much better than expected
- A little better than expected
- As expected
- A little worse than expected
- Much worse than expected

Approachability and availability of teachers:
- Much better than expected
- A little better than expected
- As expected
- A little worse than expected
- Much worse than expected
Figure 10: Perception of learning environment
Figure 11: The effect of grades/marks
In this Appendix a thorough description of the cross-tabulated variables, shown in Figures 1-11 is provided. This analysis forms the basis for the characterization of the three groups of students described in Section 5.

The variables we considered in this study involve (1) general basic characteristics, such as the student’s year of study, their age and nationality. Then we investigate: (2) the degree of freedom in students’ studies and (3) their perceptions about being forced to study or discontinue a language. We then explore factors such as students’ exposure to languages through: (4) the language background of their family and peers and (5) their own language learning. This is followed by students’ (6) perceptions of difficulty of language study; (7) sense of progress; (8) perceptions of workload with respect to the four basic skills; (9) perceptions of teachers; and (10) perceptions about the learning environment. Finally we look at: (11) the effects of students’ grades/marks.

Please note that in Figures 1 to 11 the three groups being characterised are presented in the same order, from left to right: Committed, Doubters and Quitters (as identified in Section 4.4 and in the text of this contribution).

Figure 1a shows that, as expected, those students who discontinued language studies (the Quitters) are those who have been longer at ANU, implying that some of them have discontinued language studies simply because they have completed their language major or have completed their studies altogether (the category “fourth year or Postgraduate” shown at the top of the figure includes those who have completed their ANU degree). We also have to include here those who quit because their degree does not allow for many electives, as usually, but not always, electives are available in the early years, and those who attended just one or two language classes near the end of their degree (identified as “late starters”). A similar situation is found in the case of students’ age, as shown in Figure 1b. Those who have discontinued are older than those who have continued their language study.

Figure 1c shows an interesting fact: among the Doubters there is a larger proportion of students who have completed four or more language courses. This shows that retention is not only an issue for beginner students, as there is a large proportion of students who doubt if they will continue at the stage when they have to decide whether or not to complete a language major, or, if they have already completed a major, to complete extra courses out of interest, or to qualify for Honours. The figure also shows that there is a large proportion of first year students among the committed students, and that around 40% of those who quit language and culture studies do so after they completed more than four language courses, confirming our characterisation of the Quitters described above, that is, that some simply discontinue because they were unable to study languages any longer.

Figure 1d shows that, in general, international students are more committed to language studies than domestic students.
Figure 2a shows that students who have less institutional compulsion to study languages quit more frequently. However, the figure also shows that about 35% of Quitters were enrolled in degrees that require compulsory language study, and these discontinued anyway. This could reflect that some students began to study more than one language towards a major and later discontinued studying one of them, but also that they changed degrees to avoid compulsory language studies, or chose different majors within degrees with less strict institutional language study compulsion (there were at the time “escape routes” for students studying the BA (International Relations) where they were able to substitute a language major for an international communication major that only required four language courses plus linguistic courses).

Figure 2b shows that the proportion of those who are to some extent or entirely free to study a language or not is the highest among the Quitters, and the lowest among the Doubters.

Figure 2c shows that the possible fact that the language which students really wanted to study was not available at ANU was not an issue for any of the groups, even though the figure is slightly higher for the Quitters.

Figure 2d shows results for the question of whether students would have studied a language anyway if they would have had the choice of not studying it. The difference between Committed students and the other two groups is clearly shown in the figure, as around 90% of the Committed students report that they would have studied a language anyway as opposed to less than 80% in the other two groups. The Doubters are those who proportionally report most often that they would not have studied the language or are uncertain if they would have had they had the choice.

Figure 3 explores perceptions of being forced to study a language or to discontinue it. As shown in Figure 3a, when the question is asked in general, that is, when students are asked if there is anything that compels them or forces them to study a language, there are no big differences between the groups, but Doubters express more uncertainty about the question. There are no big differences either in the proportion of each of the groups reporting that they are studying more than one language, as shown in Figure 3b. However, when a question is asked about the importance of being discouraged to study a language, as reported in Figure 3c, it is clear that for Committed students this is not important, but that it is for Doubters, and even more so for Quitters. Perceptions that other study commitments are more important are also more prominent among the Quitters, as shown in Figure 3d.

Figure 4 explores the importance of having a family background in the language and family encouragement to study the language. When the importance of having a family background in the language is explored in Figure 4a, the question is reported as inapplicable for the highest proportion in the Doubters. When family encouragement to study the language is explored in Figure 4b, there are also mixed results, but for the Committed the proportion of students reporting that this is very important or extremely important is higher than for the other two groups, while for the Doubters it is the lowest. This is likely connected with
the knowledge of languages in the students’ families and peer groups, as shown in figures 4c and 4d. Proficiency in the knowledge of languages is more prominent in the families and peer groups of Committed students.

Previous exposure to language learning is explored in Figure 5. Figure 5a shows that there is a higher proportion of Quitters who have been exchange students, likely reflecting that they either have completed their majors overseas, if they undertook their exchange as university students or that they have undertaken this exchange before entering university. Among the Quitters in this group exchange students to ANU are also included, and they are likely to have quit because they had to return to study in their own university. Figure 5b shows that the importance of having studied the language prior to the ANU is least prominent for Doubters, and Figure 5c shows that there are considerable differences between the three groups in how rewarding studying languages was before entering university. 60% of Committed students describe the experience as extremely or very rewarding, while more than 50% of Doubters report the experience to have been only somewhat or not very rewarding, or not rewarding at all. A similar pattern is found in Figure 5d, where the importance of having spent some time in the country where the language being studied is valued less highly by Doubters.

The perception of how difficult it is to study languages is shown in Figures 6 and 7. Figure 6a shows that Doubters report the highest proportion of students finding the process more difficult than expected (almost 60%). Figure 6b shows that learning the grammar in particular is perceived as more difficult than expected by more than 50% of the Doubters. A much lower proportion of Committed students, in contrast, report that courses and learning grammar is more difficult than expected.

Figure 6c shows that committed students report that they have learned more than they expected about the culture associated with the language they were learning. Doubters, on the other hand show the highest proportion of students who report that they learned less or much less than expected about culture.

Figure 6d shows that Committed students are most prominent in reporting that learning to write the language well is more difficult than they expected.

Regarding progress in their language studies (Figure 7a) and specifically the feeling that they had fallen behind in their language studies and could not catch up (Figure 7c), a higher proportion of Doubters report that these are serious problems. Doubters are also substantially more affected by their friends discontinuing language studies than Committed students and Quitters (Figure 7d). More than 40% of Doubters also have the perception that the workload associated with language learning is too high (Figure 7b). This is further explored in Figure 8, where the perception of workload associated with learning the four basic language skills (understanding, speaking, reading and writing) is reported. It can be seen that for all the skills a higher proportion of Doubters report that the workload involved is more or much more than they expected.
Figure 9 shows students’ perception of language teachers with regard to teachers’ knowledge (Figure 9a), teaching skills (Figure 9b), advice and feedback received (Figure 9c) and approachability and availability (Figure 9d). In all the figures there is a consistent better perception of teachers by committed students than by Doubters, and a consistent better perception by Doubters than by Quitters.

The same graduation in perception is found when the learning environment is examined in Figure 10. Committed students perceive this as consistently better than Doubters, and those in turn perceive it better than Quitters. It is especially important to notice also that Committed students report having more support from fellow students than both Doubters and Quitters, which suggests that Committed students cluster in class activities and group work and may-be this extends to social activities outside class (Figure 10c). Committed students are also considerably more worried than Doubters and Quitters about the size of language classes (Figure 10d).

Finally, Figure 11 reports the effect of grades obtained in language courses as a possible reason to discontinue language courses or to seriously consider discontinuing language courses. Figures 11a and 11b pertain to possible reasons students indicated as to why they had discontinued or were planning to discontinue the study of a second language. Figure 11a shows that no group reports that they thought the language course they had enrolled in was going to be an easy subject. Figure 11b shows that not obtaining good grades was more important for Committed students than for Doubters and Quitters as a reason for thinking of discontinuing language studies. The figure also shows that some 25% of Doubters are considering quitting language studies based on the grades they have obtained in the past in language classes, as they consider this reason as very or extremely important.

Actual grades obtained in language classes were incorporated into the database matching ANU student numbers in the questionnaire data with student databases. The procedure was carried out by a research assistant and researchers did not have access to the student ID numbers, because those were removed from the SPSS file used to carry out the analysis after the data-matching procedure. When the actual grades obtained in language classes are considered, we find an interesting correlation between average grade obtained in language courses and propensity to discontinue studying languages. Figure 11c shows that the averages of Committed students are systematically higher than those of Doubters, and those of Doubters are systematically higher than those of Quitters. The effect is most pronounced when the maximum grade obtained in language courses attended is considered in Figure 11d. Almost 90% of Committed students have in the past obtained a Distinction or High Distinction in a language course, and this proportion is considerably lower for Doubters and Quitters.

This detailed analysis forms the basis of the characterizations of the three groups presented in Section 5. Please note that the student characteristics presented there are not reported in the order in which they were found in the sequence of figures, but in an order that allows for full characterizations of the groups under analysis.