

A review of the literature examining the pedagogical differences between A level and university

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Executive Summary

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Executive Summary

Background

This review examines the pedagogical approaches used at Level 3 (A levels) and Level 4 (university) in schools, sixth-form colleges and universities in England. The aim is to identify the key differences in pedagogy reported within the academic community. There is anecdotal evidence that some new undergraduates receive a 'shock to the system' when they arrive at university. They feel underprepared for higher level study in multiple ways, and one of the reasons for this is that the teaching approaches employed are different from those experienced at A level. One aim of the English education system is to ensure smooth transition from one level of education to the next. If there is robust evidence of real gaps between A level and university level pedagogical approaches, this evidence could inform a drive to better encourage, facilitate, and prepare students for university. The studies reviewed were conducted against a background of a drive by the UK government to widen participation at university that has resulted in greater student diversity in recent years.

Inclusion/exclusion criteria for research reviewed

The literature reviewed comprises research, generally employing self-reports, conducted in the UK from 2001 to 2010. This research was carried out after the introduction of Curriculum 2000. There is a relatively small number of studies (10) in this period but those reviewed are all comprehensive in their examination of the topic. Studies that have been included compared teaching at A level and degree level and explored teachers', tutors' and students' views of the transition from Level 3 (L3) to Level 4 (L4). The academic subjects covered included the English subjects, History, Geography, Psychology, and Business Studies. Excluded from the review are studies focused on curriculum content, vocational qualifications or the teaching of other qualifications offered primarily in other parts of the UK. No account is taken of the progression of undergraduates beyond the first year. The pedagogical approaches used at L3 and L4 are examined from 6 perspectives: i) the pedagogy of L3 teachers; ii) students' views of L3 teachers' pedagogy; iii) L4 tutors' views of pedagogy at L3; iv) the pedagogy of L4 tutors; v) students' views of L4 tutors' pedagogy; vi) L3 teachers' views of pedagogy at L4.

Definition of pedagogy

Pedagogy includes the underpinning values, philosophy or rationale of teaching and the strategic approaches to teaching and learning employed by teachers, tutors and their institutions. Areas examined include the aims and responsibilities of teachers, teaching experience, attitudes to transition, the teaching environment, teaching approaches to the promotion of specific learning skills, and the role of assessment. Pedagogical approaches to classwork, lectures, tutorials, seminars, essay-writing, students' study skills, and assessment are considered.

Findings

Overview of pedagogy at L3

L3 teachers have a strong background in teaching and on-going professional development, but many do not have a background in the academic subject they teach. Among the factors that affect pedagogy at L3 is the fact that most classes comprise students who will go on to university and many who will not. The mixed abilities and motivations brought about by the widening variety of students now undertaking A level examinations are seen to have the greatest influence on the pedagogical approaches of many L3 teachers. The main aims of L3 teachers are to deliver the curriculum and ensure good progress towards desired grades. They have strong demands to achieve government-set targets.

Regarding teaching approaches, L3 teachers use methods that are often adapted with experience. A level teaching is generally didactic in nature. It is typically teacher-centred, involving a 'traditional' classroom layout, with the students sitting in rows in front of the teacher. However, some teachers encourage a grouped layout that is more student-centred. The vast majority of A level courses are typically taught in relatively small, class-based groups where students are comfortable asking questions. Teachers typically provide all of the information that their students will require to pass their examinations so that nothing is left to chance. L3 teachers also provide reading lists, revision guides and regular examination practice. In addition, they ensure that students attend classes and complete on-going tests. Thus students are given a lot of individual support and guidance and have frequent interaction with their teachers. However, after transition, some students felt they had been 'spoonfed' at A level, although others saw this as being 'watched over'.

When promoting specific learning skills, L3 teachers recognise the need to encourage independent learning and critical thinking skills but despite this, many recognised that trying to get students to learn independently and adopt a critical approach was not successful in most cases. One reason involved teachers' time pressures and another was related to the abilities and motivation of the students. There is some inconsistency between teachers' and students' views of the use and usefulness of some approaches within L3. For example, most L3 teachers encourage pre-reading often but it is not undertaken or thought useful by as many students as they would like. Essay-writing is felt to require the inclusion of the content required to satisfy the mark schemes and grammar and spelling are considered less important than content. Some subject-specific differences in pedagogy are apparent. For example, the level of encouragement of presentation and collaboration skills is largely dependent on the subject being taught.

Methods and styles of assessment have an important role in pedagogy at L3. Teachers instil in students the view that assessment is about achieving good grades and pay less attention to the acquisition of knowledge and skills - fact-finding rather than deep learning. There is a strong formative assessment culture at A level whereby essays and modules can be marked and commented on, re-submitted and re-marked to improve grades. The quality and quantity of feedback is very important to L3 students so it is generally very specific, detailed, timely and personalised.

The attitudes of L3 teachers towards transition are that they do not have enough time to promote university-level skills and see little need to foster contact with L4 tutors. Schools and colleges have few programmes to help students make transition. L3 teachers are generally unaware of the pedagogy at L4. They are unfamiliar with the skill sets required by continuing students and are confused about the wide range of courses on offer. Only about half of teachers interviewed from state schools and colleges felt any responsibility to prepare students for university. However, all of the teachers from independent schools felt at least some responsibility.

Overview of pedagogy at L4

Tutors often come from a strong research background but not a strong teaching background. They often exhibit some short-comings in knowledge of the A level syllabuses, teacher training background, continual professional development in teaching and ability to change their approaches to teaching with experience. Many L4 tutors define their role as that of providing support to aid students' learning and of

developing independent learning and critical thinking skills. They aim to encourage students' interest and enthusiasm in their subject and to provide students with knowledge and skills for employment and professional development.

More recently, it has been recognised that a role of L4 tutors is to mediate the mismatch between what is expected at L4 and what is typically found in newly-arrived students regarding attitude to learning and skills possessed. Tutors do not feel a need to ensure that students attend lectures or carry out homework or ongoing informal assessment. They expect more from students than them just relying on being dictated to, and encourage independent research.

Teaching generally takes the form of lectures, tutorials, and seminars. Lectures comprise relatively large groups and the unfamiliar environment they create makes it more difficult for L4 students to ask questions. In lectures students typically sit in rows facing the tutor, while in tutorials and seminars there is a less formal arrangement that is more likely to encourage interaction. L4 teaching is typically lecture-focused but more recently includes more interactive exercises. Tutors may provide lecture notes and basic reading lists but do not give students exact passages and texts to read. Tutors have relatively little interaction with their students, adopting a more impersonal approach and expecting them to be autonomous.

Regarding the promotion of specific skills, L4 tutors expect students to develop independent learning skills by searching libraries and other resources for information. Critical thinking skills are encouraged in students by requiring for example, analytical or written outcomes after reading targeted passages of text. The essay is a vehicle for confronting controversy, demonstrating original thinking and is seen as a means of providing ongoing, constructive criticism. Grammar and spelling are as important as content. As at L3, subject-specific differences in the promotion of presentation and collaboration skills are apparent.

Assessment plays an important role in pedagogy at L4. Assessment at L4 is generally summative rather than formative and essays are generally marked without the addition of specific feedback on how improvement can be achieved. Feedback at degree level was often considered by students to be non-specific and often too late to be useful. At university there is little pressure for tutors to meet academic targets or to undergo formal assessment of the effectiveness of their teaching.

At the transition phase, L4 tutors' views of the abilities and skills possessed by new students appear to have changed in recent years. Tutors recognise that new entrants will not necessarily have all of the learning skills they will require to undertake degree-level study. Furthermore, university tutors believe that the nature of teaching and assessment at A level has not broadened students' academic abilities. Explanations included teaching to the test, over-reliance on taking and recycling notes, decline of analytical abilities and less experience in independent reading. Some universities now hold remedial classes and study skills workshops for new students although students are not always aware of them. One is the 'Flying Start' project run at Liverpool and Derby universities. Some L4 tutors recognise the need to foster contact with L3 teachers, but few report having this level of contact.

From the students' perspective, many L4 students find that there are major differences in the amount of work they have to undertake between A level learning and degree course learning. Many feel they do not have the skills required. However, some do feel more confident in their abilities to undertake higher-level study but their confidence is often mis-placed.

Main differences in pedagogy

1. At L3 the main aim is to impart the curriculum and ensure good grades, whereas at L4 the main aim is to encourage autonomy, self-confidence, problem-solving abilities and enthusiasm for the subject.
2. L3 teachers have a strong teaching background and undertake continual professional development but may be weak on subject knowledge, while L4 tutors have a strong research background but little formal teaching background and generally do not undertake continual professional development.
3. At L3, teaching effectiveness is measured by maintaining good position in league tables whereas there is little formal monitoring of teaching effectiveness at L4.
4. L3 teachers maintain personal and frequent interaction with students, unlike L4 tutors who adopt a more 'hands-off' approach.
5. At L3 students are seen as receptive learners and teachers impart all the information required, whereas at L4, tutors provide basic information and students are expected to be autonomous learners.
6. The function of essays at L3 is to regurgitate facts and figures, while at L4 they are expected to illustrate original and critical thinking.

7. L3 assessment is generally formative while L4 assessment is generally summative.
8. At L3, students are thoroughly prepared for assessment and provided with all information needed. In contrast L4 students are expected to gather most of the information they need themselves.
9. At L3, assessment feedback is personalised and provided regularly in a timely way, whereas at L4 feedback is non-specific and not timely.
10. Teachers have few strategies to aid transition and do not have enough time to promote university level skills, whereas L4 tutors must promote skills required for degree-level study.

Main similarities in pedagogy

1. There is general acknowledgement of the wide and varied background of students.
2. One shared aim of teaching is to provide skills for future employment and professional development.
3. A teacher-centred approach is used by some teachers and by tutors in lectures and a student-centred approach is used by some teachers and in seminars and tutorials.
4. There is shared recognition of the need for independent learning and critical thinking skills at university level.
5. Students are expected to be good at note-taking.
6. The uses of presentation skills and collaboration skills are not widely promoted although it is agreed that these would encourage self-confidence.
7. Feedback quality and quantity are very important to teachers, tutors and students although it is not always provided to students as they expect it to be.
8. Teachers and tutors generally do not have knowledge of the pedagogy or the contents of their discipline at the other phase of education.

Conclusions

A number of factors are seen to impact pedagogy. Furthermore, the teaching approaches at both phases of education have been shown to be deficient in preparing students for degree level study. L3 students are generally not confident about their abilities to cope with degree level study and L3 teachers and L4 tutors recognise the need for remedial action to be taken. Some initiatives have already

been put in place and there have been many suggestions from the teachers and tutors regarding other strategies that could be developed.

Factors that impact pedagogy

The academic backgrounds of some L3 teachers and L4 tutors have a distinctive impact on their pedagogy. Some L3 teachers have little background in their taught subject and some L4 tutors have had little formal teacher training. In addition, it is generally recognised that the skills of first-year university students may not be the same level they were 10 to 15 years ago and students' attitudes to study may be different at L3 than they are at L4. The methods and type of assessment required at each phase play a role in approaches to teaching. The introduction of Curriculum 2000 resulted in L3 teaching being assessment-driven rather than learning-driven, although it has had little impact on the pedagogy of L4 tutors.

Steps already being taken to bridge the gap

At L3, a Pre-University Skills course has been developed to make A level students more aware of the skills that will be required at university. Among other factors the course aims to:

- show pupils the processes involved in academic research and the process of disseminating information to different audiences at university level
- make pupils aware of assessment and feedback procedures at university

In addition, some L3 teachers are taking steps to address a lack of independent reading skills among their students. Some of these include:

- allocating some independent study time to reading
- guided library visits
- a 2-day residential course with workshops specifically for the promotion of wider reading.

At L4, some universities have introduced remedial classes in the first year of study, while others (for example, the Open University) have started to produce general guides to studying. Furthermore, some L4 tutors are making the start of degree courses more applied and less theoretical, and tutors at the University of Northampton have found that targeted 'scaffolding' of students' existing skills can be encouraged and enhanced within their first year of study.

Suggestions of further steps that could be taken at L3 to aid transition

L3 teachers could:

- expand the student-centred approach in an attempt to ensure that students grasp the thematic and formal issues of the texts
- encourage students to take a more critical stance in relation to texts
- progressively increase the number and length of lectures they give
- gradually restrict the amount of notetaking that students are allowed to make
- encourage presentations from outside speakers on their specialism so as to prepare for the format of university teaching.

Suggestions of further steps that could be taken at L4 to aid transition

L4 tutors could:

- provide more support and guidance to enhance the progress of new students as they have been accustomed to high levels of support and guidance at L3
- emphasise the importance of efficient time management
- encourage students to undertake group oral presentations in order that they can develop skills and confidence not fostered at L3
- make themselves aware of the different specifications of A level courses to gain better understanding of the knowledge base of newly arrived students
- provide more timely and regular feedback to take into account the prior experience of new students.

Summary

The pedagogy of L3 teachers and L4 tutors differs in many areas. These include the aims and responsibilities of each group, training and experience, expectations of students, the teaching environment, the prioritisation of certain skills and abilities, the approach to assessment and attitudes to issues of transition. Similarities are seen across both groups in their desire to aid students' professional development and in general teaching styles. Teacher-centred and student-centred approaches are both employed at each phase of education. L3 teachers and L4 tutors recognise the need for students to gain independent learning skills and that they should be able to think critically. However, both agree that these and other skills are no longer generally present at transition. It is recognised by both groups that there are shortcomings at each phase of education and that each could do more to aid transition.