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IFP student skills in data collection, analysis and presentation

Who shoulders the linguistics burden? – An investigation into verbal scaffolding strategies in the subject classroom

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Conference 2014

Assessment as a tool for learning on the IFP

We are pleased to announce the fifth annual *InForm* Conference will take place at the University of Kent.

The event will include presentations and workshops on themes related to international foundation and pathway programmes and provide an opportunity for interaction and sharing of practice with colleagues from the IFP community.

Saturday 19 July 2014

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Please check our website for details:
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Speaker proposals

Speaker proposals are invited from professionals involved in the delivery of international foundation and pathway programmes. As usual, the focus should be on issues associated with teaching and learning in this sector and address the conference theme. Sessions need to appeal to tutors and course managers across the curriculum.

The deadline for speaker proposals is 30 April 2014.

Inside *InForm* …

From the Editorial Board …

The *InForm* journal is now entering its seventh year and it is a pleasure to see such a wide variety interesting and engaging articles yet again. The interdisciplinary nature of the environment we all work in is evident throughout.

Simon William Rees and Megan Bruce report on The FOCUS project at Durham University which look at a work done to produce corpora informed teaching materials for Chemistry. Continuing the theme of subjects working together and supporting each other Dawn Willoughby from the University of Reading examines the integral nature of statistics to a wide variety of disciplines.

Emma Tudhope from the University of Sheffield offers guidance and advice on dealing with and identifying Dyslexia in IFP students with English as an Additional Language; Sandra Striegel from INTO Newcastle University reports on a study investigating the importance of scaffolding and its impact providing opportunities for learning both content and language; finally, Alison Gardener looks at the challenges involved ind delivering an accelerated IFP at Keele University.

Plans for the 2014 *InForm* conference are now well underway. The one-day conference takes place on 19 July at the University of Kent and centres on the theme of assessment as a tool for learning on the IFP. We hope the Conference will provide a welcome opportunity for collaboration and sharing of ideas and we look forward to seeing you all there.

As always, we welcome contributions and suggestions for future editions. If you would like to write an article, comment on issues raised or make a suggestion, please contact us on: **inform@reading.ac.uk**. We also encourage you to join our JISC mailing list through the link on our website: **www.reading.ac.uk/inform**

Louis Rogers
Chair of the *InForm* Editorial Board

IFP student skills in data collection, analysis and presentation

About the author

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This article explores why it is important for IFP students to develop skills in data collection, analysis and presentation regardless of their specific choice of subject modules. It highlights some of the problems associated with teaching statistics to international students and offers some suggestions for addressing these issues.

Introduction

Every day in the media we are bombarded with facts and figures including tables of data, graphs and charts, and headline statistics. Data can tell us interesting and important facts about a wide range of subject areas, whether we are browsing the Internet, watching the news on television or reading a magazine. Studying statistics at an introductory level allows us to make sense of this information and can help us to make more informed decisions.

Preparation for undergraduate courses

A brief search using an online university prospectus will show that many undergraduate courses include a module in statistical methods during the first year of study, whether the main subject area is psychology, food science, business and management, or one of the other popular choices of degree programme for our students. Through my experience in the Henley Business School at the University of Reading, I have found that IFP students often feel overwhelmed by the fast pace and large class sizes that typically characterise statistical methods modules at undergraduate level. As one of the main aims of an IFP programme is preparation for future studies, we should consider data handling and analysis to be an essential part of the skills toolkit that we expect our students to develop.

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Critical thinking

Bean (2011) suggests that, in terms of critical thinking, students in general are not proficient in questioning assumptions or evaluating evidence. For international students, these problems can be compounded by cultural differences in teaching and learning. Statistical data, in both graphical and numerical form, can look very convincing to the reader: pie charts are presented in attractive colours with three-dimensional effects, and the results of calculations are accompanied by unexplained jargon such as p-values and confidence intervals which may be beyond our level of understanding. On IFP programmes, we need to extend the teaching of critical thinking to

encourage students to evaluate the quality of the data on which the graphs and results are based. For questionnaire and interview based investigations, we should consider the sample size, the method used to select people for participation and the type of questions that were asked. If we are analysing graphs and charts on websites, we should check that recent data has been collected from a reliable source and that we understand any underlying assumptions or definitions.

The language of statistics

In addition to developing critical thinking skills, we should consider ways in which we can help IFP students to understand the linguistic complexities involved in working with numerical data. There is a common misconception that language teaching in statistics should be focussed on understanding the meaning of key statistical terms such as histogram, median and quartile. However, when discussing the language challenges faced by international students in lectures, Gillway (2012) highlighted the confusion of using everyday words that have a different meaning in a subject-specific context. The study of statistics is littered with words that fall into this category – discrete, mode, key and class are some examples. Non-native speakers may initially find it difficult to comprehend that there is a new meaning associated with these words. It is also important that we provide the opportunity for IFP students to learn how to express themselves clearly when they are presenting the results of their statistical analysis. Particularly when referring to information shown in a graph or chart, the appropriate use of relative clauses and correct choice of the active or the passive voice will improve the readability of the students' descriptions.

Compartmentalised learning

Some educators focus on providing statistics teaching as an introductory course (Garfield, 2002). Whilst I would agree that this may be suitable for undergraduate level, a recent incident reinforced my view that data collection and statistical analysis techniques

'data collection and statistical analysis should be firmly embedded in the content of subject specific modules for foundation programmes.'

should be firmly embedded in the content of subject-specific modules for foundation programmes. Last term, I taught an introductory course in statistics to IFP psychology students, focussing initially on data collection using questionnaires. For several lessons the students had been devising a set of guidelines for writing effective survey questions and one of the straightforward guidelines in our list highlighted the need to avoid overlapping options in tick boxes. At the same time, some of the students were completing a staff-based data collection assignment for their sociology module and I was asked to fill out a questionnaire to provide them with data. Imagine my surprise when I came to a question that was phrased:

What is your age?   18-25 ☐   25-35 ☐   35 or over ☐

When queried, the student said she had not thought to apply the knowledge learnt in the psychology module to the sociology assignment: this student had compartmentalised her learning rather than using transferable skills for different subject areas.

Student engagement

There will be many students on our programmes who feel that working with numbers is not their 'strong point'. By embedding the teaching of statistics in subject-specific modules, lecturers can find ways to challenge this viewpoint and encourage all students to develop their numerical skills. I would suggest that most modules could include several sessions on data handling – this might include topics such as questionnaire design, presentation of data using graphs and charts or assessing the reliability of data found using the Internet.

In my experience, students are much more likely to be engaged if they are actively involved in a small-scale statistical project. For example, they could be asked to write their own questionnaires, collect data through observations or write a description of a given set of data. Designing an investigation based on real data related to the subject of the module will increase the interest of students and could provide a new perspective for the lecturer and their teaching.

Conclusion

Being able to understand, describe and present statistical data in both graphical and numerical form is an essential skill for undergraduate study and life beyond the classroom. The teaching of statistical methods to IFP students should be embedded in the curriculum for subject-specific modules using relevant data and activity-based work. We should also consider extending existing material for critical thinking and language classes to include appropriate elements of statistical analysis. In his 1951 presidential address to the American Statistical Association, the statistician Samuel S. Wilks was paraphrasing H.G Wells (1904) when he said, 'Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.' I believe that day has arrived.

Bean, J.C. (2011). Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom. 2nd edition. Jossy-Bass. San Francisco.

Garfield, J., Hogg, B., Schau, C., and **Whittinghill, D.** (2002) First Courses in Statistical Science: The Status of Educational Reform Efforts, *Journal of Statistics Education* [Online], 10(2).

Gillway, M. (2012). Making the language of lectures accessible to students: the case of chemistry. *Inform, 9* 11–12.

Wells, H.G. (1903). Mankind in the Making. Chapman and Hall. London.

Who shoulders the linguistic burden? – An investigation into verbal scaffolding strategies in the subject classroom

About the author

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For international students participation in academic seminars can be challenging. Teachers therefore have the responsibility to create linguistic bridges, so-called 'scaffolds', to support student learning and encourage participation. On the basis of a small-scale practitioner enquiry, this article argues however, that in the attempt to build such verbal support structures, some subject teachers (particularly if they are not experienced in language teaching) might actually run the risk of 'smoothing' out conversation to such an extent that learning opportunities for both language and content are restricted.

Who shoulders the linguistic burden? – An investigation into verbal scaffolding strategies in the subject classroom

'Who shoulders the linguistic burden?' seems an odd question to ask in the context of an international foundation programme. Of course it is the students, one might hasten to answer, citing examples of students clumsily expressing their ideas, struggling to come up with basic words let alone key terminology, and abandoning sentences mid-way. There is

no denying that for non-native speakers seminar discussions can be a linguistically challenging undertaking (to say the least) and that it is our responsibility as teachers to build bridges – or in Vygotskyan terms 'scaffolds' – to provide verbal assistance. However, based on the findings of a small-scale practitioner-enquiry, this article argues that in the attempt to help linguistically weaker students, some subject teachers might all too easily fall in the trap of shouldering the linguistic burden themselves, thus denying students learning opportunities.

Scaffolding

According to sociocultural learning theory, it is the role of the teacher to create support structures that 'enable the child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his [sic] unassisted effort' (Wood et al., 1976: 90). The aim of such temporary 'scaffolding' is to enable the learner to complete a similar task alone in the future (Llinares et al., 2012). Depending on the context, scaffolding can take different forms, from curricular planning to choice of materials and staging of tasks. In the second language classroom much research has been undertaken in how teachers use verbal scaffolding to foster language learning in classroom interaction (e.g Walsh, 2002). Furthermore, scaffolding has been identified as one of the key strategies in Content and Language Learning (CLIL), that is in situations where subjects are studied in a second or foreign language (e.g. Coyle et al., 2010). This area of research seems particularly relevant for international foundation students who, like CLIL learners in other contexts, face the two-fold challenge of grappling with complex academic content while simultaneously improving their English skills.

However, very little is known about the extent and types of verbal scaffolding strategies that teachers use on pathway programmes. Equally, it is not clear to what purpose such strategies are being employed – to foster the learning of content or language? In order to gain insight into these questions a small-scale practitioner enquiry was undertaken to compare the scaffolding strategies of two foundation subject teachers: one with experience of teaching English, the other without. The aim was to investigate to what extent the teachers used similar or different strategies and what impact this would have on the learning opportunities that were created.

An investigation into verbal scaffolding strategies

The teachers were interviewed about their lesson aims, then lesson recordings were undertaken. The students involved were all enrolled on a pre-Masters social sciences module and all had English levels at 5.5 to 6.0 IELTS. The classroom data was transcribed and analysed using an applied Conversation Analysis (CA) approach (e.g. Bowles and Seedhouse, 2007).

Looking at the overall conversation pattern, the interaction in the two classrooms seemed quite similar as in both cases the discourse was dominated by 'IRF' patterns (initiation – response – feedback). That means it was generally the teachers who initiated the conversational moves, a student responded with an answer or comment, and this was then followed up with a teacher comment evaluating the answer. IRF is common in subject classrooms and has been described as a means of scaffolding as its intention is to guide students through a task and to help create a space of shared meaning construction (Dalton-Puffer, 2007).

However, with regard to the content and language learning opportunities created through the IRF pattern the microanalysis of the talk revealed quite striking differences between the two classrooms. The subject only teacher initiated the conversation with an open question but when the students were not forthcoming with an answer, he quickly changed his tactic and asked a series of closed display questions (i.e. questions that the teacher knows the answer to). Each of these questions did not require a lengthy response and so the students gave one- or two word answers, with the teacher often completing and extending the utterance. In those cases where the students did not come up with an answer, the teacher quickly rephrased the question and, if this did not bring the desired result, gave the answer himself.

The second teacher (who had English language teaching experience) on the other hand, used a greater variety of scaffolding strategies: besides questions, this teacher used the feedback move to raise students' awareness of new linguistic items; repetitions were used to signal agreement with an idea and pronunciation modelling took place. If a student was struggling mid-sentence she would feed in a missing word. In instances where students' utterances were flawed (linguistically or in terms of the idea expressed), she would reformulate the answer, extend it if necessary, and use word stress to highlight that the utterance had been reformulated.

The conversational input appeared less 'smooth' as backtracking and clarification requests were more frequent than in classroom one. However, it will be argued that this actually provided more learning opportunities for the students. Due to the flexible use of a range of scaffolding strategies, the discourse in the second classroom moved swiftly from content to language and back. Student utterances were rarely completed for them and this resulted in overall more and longer student turns than in classroom one, where students' short answers merely provided the 'cues' for the teacher to expand on. Thus, in terms of language learning, classroom two provided more opportunities for students to actually practice their oral language skills. Arguably, this also had an impact on content knowledge as students were truly engaged in the discussion of the content and thus took part in co-construction of knowledge.

Discussion and conclusion

The results show that both teachers used scaffolding strategies to assist their students and it has to be stressed that the findings can in no way be seen as an evaluation of the teachers' overall teaching skills.

'international foundation students . . . face the two-fold challenge of grappling with complex academic content while simultaneously improving their English.'

Both teachers were experts in their fields with many years teaching experience. Rather, they seem to mirror results of previous studies where subject teachers in other CLIL settings showed a similar focus on content matter with a predominance of display questions, long teacher turns and few opportunities for students to engage in the negotiation of meaning (Musumeci, 1996; Dalton-Puffer, 2007). It seems that in the attempt to support students with weak language abilities, subject specialists without language teaching experience may be more likely than those with such experience to fall in the trap of 'smoothing out' conversation and thus burdening the linguistic effort themselves. In order for learning to take place, however, students need to be engaged in negotiation of meaning and co-construction of knowledge and this is unlikely to be trouble-free (Llinares, et al. 2012; Walsh, 2006). Raising awareness of this and of the range of scaffolding strategies available to allow subject teachers to deal more flexibly with 'troublesome' verbal interactions therefore seems a crucial issue to enhance international students' learning.

'in order for learning to take place, however, students need to be engaged in negotiation of meaning and co-construction of knowledge.'

Verbal scaffolding can take various forms, depending on the teacher's pedagogic goal. If the teacher for example aims at engaging students in a discussion beyond the mere repetition of facts, it is important to not only rely on display questions, but to actually raise questions that challenge students to move beyond one-word answers and produce analytical and evaluative responses (Dalton-Puffer, 2007). This might involve extending the wait time to give students sufficient 'thinking space' before they attempt to answer a question (Walsh, 2006). Further, teachers need to be aware when to feed in a missing word or phrase, yet without completing the utterance themselves. If a contribution is ambiguous (in terms of language or content), teachers can use confirmation checks or invite the student to clarify their answer (ibid.). Form-focused feedback, modelling, extension and reformulation are also ben-

eficial strategies to promote student learning; however, it has been shown that the latter is only effective if students are actually aware that an utterance has been reformulated (Lyster, 2007). This can be achieved by using word or sentence stress for greater emphasis, or by explicitly drawing attention to more appropriate language.

All of these strategies are examples of how teachers can help international students master the linguistic challenges of the content classroom – to 'smooth out' conversation and thus carry the burden for them is not a solution.

Bowles, H. & **Seedhouse, P.** (eds.) (2007). *Conversation analysis and language for specific purposes.* Berlin: Peter Lang.

Coyle, D., Hood, P. & **Marsh, D.** (2010). *CLIL – Content and Language Integrated Learning.* Cambridge: Cambridge University Press.

Dalton-Puffer, C. (2007). *Discourse in Content and Language Integrated Learning (CLIL) Classrooms.* Amsterdam: John Benjamins.

Llinares, A., Morton, T. & **Whittaker, R.** (2012). *The roles of Language in CLIL.* Cambridge: Cambridge University.

Lyster, R. (2007). *Learning and Teaching Languages through Content: A counterbalanced approach.* Amsterdam: John Benjamins.

Musumeci, D. (1996). Teacher-learner negotiation in content-based instruction: communication at cross-purposes? *Applied Linguistics,* 17, 286–325.

Walsh, S. (2002). Construction or obstruction: Teacher talk and learner involvement in the EFL classroom. *Language Teaching Research,* 6(1), 3–23.

Walsh, S. (2006). *Investigating Classroom Discourse.* London: Routledge.

Wood, D., Bruner, J.S. & **Ross, G.** (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry,* 17, 89–100.

Identifying Dyslexia in International Students for whom English is an additional language

About the author

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The progress of international students studying English as an additional language (EAL) can be impacted by an additional specific learning disability, such as dyslexia. Distinguishing between language learning difficulties and dyslexia can, however, prove challenging for tutors.

The paper describes specific difficulties that dyslexia can present and discusses how tutors can identify these difficulties, using a holistic approach, to enable students who have dyslexia to be identified and thus receive appropriate support..

Significant progress has been made in terms of assessing and supporting students with dyslexia in the UK over the past twenty years (Everatt et al., 2009). Considerable research into dyslexia has increased educationalists' awareness of dyslexia and recognition of the

need to ensure that students with difficulties or differences are not disadvantaged in the classroom. Despite progress in the identification of dyslexia, relatively little work has been done in the field of identifying EAL students with underlying difficulties such as

dyslexia (Mortimore et al., 2012). Indeed, some studies have shown that 'bilingual pupils are significantly under represented among pupils who are assessed as having learning difficulties/dyslexia' (Deponio et al., 2000). This under-representation could have serious implications for students who have underlying difficulties as they are unlikely to get the support that they need to achieve their full potential. Although it is vital that these issues are addressed, identifying underlying specific learning difficulties is particularly challenging with EAL students, so it is perhaps not surprising that tutors opportunities to refer them to a qualified assessor (Hutchinson *et al.*, 2004 cited in Nijakowska, 2010).

A multidimesional model of dysleixa

Some theorists and researchers have moved towards definitions of dyslexia that encompass behavioural, cognitive, biological and environmental factors which can be useful, particularly in light of the complexity of assessing multilingual students. As Frith (2002) outlines:

'the consensus is emerging that dyslexia is a neuro-developmental disorder with a biological origin, which impacts on speech processing with a range of clinical manifestations. There is evidence for a genetic basis and there is evidence for a neurological basis, and it is clear that the behavioural signs extend well beyond written language...in each case the symptoms have to be understood within the relevant cultural context.' (Frith, 2002 cited in Mortimore et.al 2012:17)

Despite its use of medical language, this definition acknowledges that dyslexia needs to be examined on different levels, that difficulties go beyond those of 'reading' and 'spelling' and other theorists such as Mortimore *et al.* take this even further to argue that that the cultural context, or learning environment that the student is in can determine whether 'differences' are experienced as difficulties or not (2012). Some of these broader issues will be explored below.

Understanding students' cultural and educational background

Gaining as much information about a student's educational, cultural and language background as possible (Hansen et al., 2012) can help evidence dyslexia. If a student has experienced similar problems in their first language as they do in English, then it could suggest the presence of an underlying difficulty (DfES, 2009). However, it is important to find out how inclusive an EAL student's learning environment was, before assuming that the student's difficulties are the result of an underlying Specific Learning Difficulty (SpLD) such as dyslexia. This could be established by asking the student about some of the teaching methods that were used during their schooling/previous education were and whether or not they felt like they could learn in class with the methods used. If the student has lived through a war in their country, then it is important to establish how this impacted on their learning. Assessors and tutors also need to be aware that some languages have transparent orthographies (meaning that they have a strong sound-letter correspondence), and consequently, some difficulties may not be evident

'Gaining as much information about a student's educational, cultural and language background as possible can help evidence dyslexia.'

in the student's first language (L1). Chinese is an example of a highly transparent orthography and it can potentially pose fewer or different challenges for some Dyslexic students (Nijakowska, 2010). Some students may therefore arrive in the UK without the 'typical' history of difficulties.

Looking beyond students' history of support

Another way of identifying potential problems is by exploring the student's history of support. Unfortunately, in the case of International students, tutors cannot assume that students have either been assessed or supported for dyslexia. Standardised tests in languages other than English are rare, and there is also the issue of how seriously different international communities take dyslexia (Smith, 2010). It can be insightful, therefore, to determine the attitude and level of awareness of dyslexia in the student's country, before relying too heavily on a student's lack of a history of support as a basis to rule-out a potential difficulty.

Establishing some of the differences between 'expected' and 'unexpected' EAL mistakes

Knowledge about a student's first language and some of the characteristics of that language can also help in distinguishing between 'expected' and 'unexpected' mistakes (Helland, 2008 cited in Nijakowska, 2010). For example, as Farsi is written from right to left and uses a completely different alphabetic system, letter reversals could arguably be an 'expected' problem for these students. 'Typical' problems with their pronunciation, for example, adding an 'ĕ' sound before consonant clusters, and finding certain consonant blends (bl, fl, pr, sp) difficult to pronounce correctly (Wilson, 2007), can make spelling words containing these sounds incredibly challenging. With these difficulties in mind, it is important to find out from the student, the extent and quality of the English Language instruction that they have had before assuming an underlying phonological deficit is to blame for a lack of second language acquisition (Nijakowska, 2010:110). Questions also need to clarify whether English is spoken in the home and how long they have been speaking/reading/writing in English. The SpLD Test Committee states that if a student started learning English after the age of seven, or if they have been in the UK for less than seven years without prior knowledge of the language, 'some impact on phonology and pronunciation is generally to be expected.' (DfES 2009: 3).

Kormos et al., 2012: 87), use an example of a student's written work to highlight some of the similarities between mistakes made as a result of dyslexia and expected EAL errors. The short written passage that she uses, has actually been written by an adult student with Dyslexia whose first language is English, yet it could easily be mistaken for work by an EAL student as it contains 'verb agreement errors, missing words, misused prepositions and malformed sentences.' (Kormos et al.,2012: 87). Other language skills should, therefore, also be considered. A possible indicator, for example, could be being unable to spot patterns, e.g. a student can pronounce a word like hoping, but cannot recognise that coping, sloping and eloping have the same pattern.

Other difficulties associated with dyslexia

Other difficulties, beyond those that impact upon language, have been linked to dyslexia; particularly problems relating to organisation and time management (Klein, 2003),a limited working memory capacity (Gathercole et al., 2009) slower processing speeds, sequencing and concentration. (Klein 2003). Tutors may have noticed that these students find it particularly difficult to organise their files and meet deadlines and structure their written work. Additionally, if the student has a limited working memory capacity, they are likely to have problems following multiple oral instructions, remembering them and acting upon them. The tutor could also ask the students whether they find it harder to do mental arithmetic rather than other types of maths which rely less on the working memory.

Referring students for support

Tutors are advised to consult specialists in their own institutions about formal processes and procedures for referral, and to avoid labelling a student as 'dyslexic' until they have received a formal diagnosis from a qualified specialist.

'the recognition of these difficulties can be instrumental in ensuring that students have the opportunity to reach their potential.'

In conclusion, therefore, whilst identifying dyslexia in EAL students can be a challenge for tutors, the recognition of these difficulties can be instrumental in ensuring that students have the opportunity to reach their potential. If a student has a diagnosis of dyslexia, they will be eligible for extra support, such as exam concessions and one to one tutorial support. In order to determine whether a student has signs of dyslexia, a holistic approach must be taken, considering factors such as the student's educational history, whether their difficulties go beyond those expected of an EAL student, and take into account problems that go beyond language, such as issues with organisation and time management and the working memory.

Colledge, M. (2012). Approaches to Teaching Dyslexic Students. *InForm, 9, 8–10.* Available at http://www.reading. ac.uk/web/FILES/inform/B04924-web-Inform-9-v5.pdf

Department for Education and Skills (DfES). SpLD Test Evaluation Committee (STEC). (2009). *Suitable Tests for the Assessment of Specific Learning Difficulties in Higher Education 2009/2010.* London: DfES.

Deponio, P., Landon, J., Mullin, K., Reid, G. (2000). Dyslexia and bilingualism – implications for assessment, teaching and learning. In Peer, L., Reid, G., (eds.) *Multilingualism, literacy and dyslexia: a challenge for educators.* London: David Fulton Publishers. pp52–69.

Everatt, J., Reid, G. (2009). Dyslexia: An overview of recent research. In: Reid, G. (ed.) *The Routledge companion to dyslexia.* Oxon: Routledge. pp 3–21.

Gathercole, S E., Packiam-Alloway, T. (2009). *Working memory and learning: A practical guide for teachers.* London: Sage.

Hansen, L., Mortimore, T. (2012) Dyslexia and multilingualism – identification and intervention. *PATOSS Bulletin,* Winter, 2–8.

Klein, C. (2003) *Diagnosing dyslexia: A guide to the assessment of adults.* London: The Basic Skills Agency.

Kormos, J., Smith, A.M. (2012). *Teaching languages to students with specific learning differences.* Bristol: Multilingual Matters.

Mann, V. (2013). Dyslexia and international students: supporting international students with dyslexia in English for academic purposes. Inform. Vol 11. pp 9–11.

Mortimore, T. (2008). *Dyslexia and learning style: a practitioner's handbook.* West Sussex: John Wiley and Sons, Ltd.

Mortimore, T., Hansen, L., Hutchings, M., Northcote, A., Fernando, J., Horobin, L., Saunders, K. and **Everatt, J.** (2012) *Dyslexia and multilingualism: Identifiying and supporting bilingual learners who might be at risk of developing SpLD/dyslexia.* British Dyslexia Association and the Lottery Fund.

Nijakowska, J. (2010). *Dyslexia in the foreign language classroom.* Bristol: Multilingual matters.

Smith, A.M. (2010). Adapting assessment procedures for learners with different first languages. *PATOSS Bulletin.* June. 37–42.

A holistic and integrated approach to the design of a new, April start Foundation Programme

About the author

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In 2013 Keele University introduced the Accelerated International Foundation Year. This programme is unusual in that it has an April start date and runs for six months ending in September, with students being able to progress directly to a degree starting in October. A key focus of the programme was a high degree of contact between the student and personal tutor from pre-arrival through to transitioning into their degree programmes. In developing the course, which consists entirely of international students, opportunities were taken to internationalise and integrate English Language, skills and subject modules to provide a holistic and coherent experience for students.

Rationale

Many International Foundation Programmes (IFPs) offer the flexibility of commencing in September or January for entry into a degree the following autumn. Despite being well-established, the Keele Foundation Year Centre did not offer an alternative start date prior to 2013. As part of a university-wide goal to increase the numbers of international students it was mooted to offer a January start IFP. In reviewing the possibilities of start dates April was chosen mainly due to logistical reasons,

such as availability of accommodation, teaching rooms and laboratory space, as well as balancing staff workloads. The Accelerated International Foundation Year (AIFY) was initially developed to match the Science Foundation Year programme for the main September cohort but, following interest from other faculties was expanded to include Business and Finance pathways. The term 'accelerated' was introduced to the programme name in order to acknowledge the fact that the AIFY involved a shorter route through a full 120 credit foundation programme, therefore requiring a higher rate of learning. A key point is that this start date offers international students who receive their exam results in January and require a Foundation Year the opportunity to commence their degree in the same year.

Programme ethos

The aim of the programme was to offer a holistic approach that offered students the opportunity to develop 'inner value' elements identified as important to overseas students, such as increased confidence, self-esteem and ambition to enhance career opportunities (Kuznetsov, 2011, p.360). In order to ensure this, and given the intensive nature of the programme, pastoral care was designed to be equally intensive but also flexible (McNorton and Cadinot, 2012,). Students were in regular email contact with their personal tutor from application and pre-arrival. Weekly contact was maintained throughout the programme and continued during the students' transition into their degree programmes. Hence, students had a continuous point of contact of support and guidance between the two transition periods.

Aside from credit awarding modules, students participated in an Away Day and associated workshops that were designed in consultation with the students. These workshops allowed students to commence their Keele University Skills Portfolio and to address inner-value elements related to developing career ambition and their own expressed needs. Given the intensive nature of the programme it was perhaps unsurprising that the students requested workshops on Time Management, Stress Management and Dealing with People. The latter workshop proved particularly beneficial in that it allowed students to address cultural differences within conflict resolution. For example there had been one issue with a student struggling to work within a group because they felt it was disrespectful to disagree with another student who was older (by three years). This had generated a lot of stress for all concerned. However, after the workshop the student understood that not everyone was aware of or followed the same rules, hence this opened up a positive dialogue between the students.

The overall programme also ensured that an internationalised curriculum acknowledged the students' position within the international community. The development of this curriculum, and the overall ethos of the programme, is based on the definition of an international curriculum as one that builds an international and intercultural dimension into the content of the curriculum, including the teaching and learning processes and support services (Caruana 2011). For example, lectures and seminars on music psychology in the Introduction to Psychology module expanded from addressing European music, such as Mozart, to that of the students' home countries. A seminar allowed students to select music indicative of their culture and to present it to the class, explaining its meaning and the feelings it elicited. Within Biology modules it is ensured that the examples of diseases, genetic and infectious, cite global or international examples.

Naturally such discussions and redesign of the module curricula required both students and staff to demonstrate an awareness of their own cross-cultural competencies, as defined by Rathje (2007). Although formal training did not occur, the ethos of the AIFY in terms of the openness and cohesiveness of the group meant that conversations took place in a setting of sensitivity and self-awareness.

Course structure

Students follow individual routes through the programme depending on their intended degree progression. Core modules include: Academic Development, Communication Skills, Foundation English, and Elementary Mathematics (not required for Social Sciences/ Humanities). Subject-specific and optional modules make up the total to 120 credits.

A second aim in designing the programme was to ensure that the academic integrity of the subject content matched that of the full year programme. This raised challenges given the shorter time frame and demanded that students had heavy timetables with a rapid turnover of assignments. To address this and to allow students to have a streamlined experience, EAP, skill and subject modules were reviewed in order to complement each other in terms of content and skills development.

It has been noted that EAP modules should incorporate subject-specific materials into their syllabi, particularly for science related skills and materials, to avoid confusing the students with conflicting approaches between subject and EAP tutors (Hoodith, 2013). A key feature of the AIFY was indeed the building of close relationships between staff within Keele's Language Learning Unit and science tutors in the design of module content and assessments for both EAP and science modules. This included completing subject module vocabulary lists, reviewing subject text-books and co-designing assessments based on subject-specific word-banks, use of scientific language and writing of science reports. EAP tutors were also provided with a full student profile by the AIFY programme director in order to aid planning. Students therefore were sub-divided by both language ability and pathway to ensure a bespoke experience.

This 'cross-pollination' of modules (McNorton and Cadinot, 2012, p.7) provided the students with the opportunity to appreciate the relevance of both the content and the skills developed, whilst minimising repetition (for example they were not taught several times how to write science reports or repeatedly assessed on presentation skills).

In addition, subject module content was also reviewed in order to address the entirely international nature of the student cohort. This involved ensuring that examples, such as inherited disorders in genetics topics and the role of music in psychology modules, were set in a less western orientated context.

Student profile

Nineteen applications were received for AIFY 2013, with 7 students commencing the programme in April 2013. Entry level varied from WASSCE level qualifications (Nigeria) to 2nd year Medical school credits (Pakistan). English Language ability varied from WASSCE English language C5 through to IELTS 7.0. Countries of origin included Kenya, Nigeria, Zambia, Brunei (3) and Pakistan. For the AIFY 2014, 32 applications have been received so far. Again, students come from a range of academic backgrounds and countries.

Reflections and recommendations

The programme was evaluated by administering individual module questionnaires to students In addition, module leaders submitted a report on the achievement of the students and with further recommendations. Feedback was positive and the sense of achievement high, but clear suggestions were made to help manage time and stress. In reflecting on the first year and feedback, changes made include:

'Feedback was positive and the sense of achievement was high.'

- Changing the programme structure from three to two 10-week teaching blocks with a two week reading week/exam week in the middle and a final exam week.

- Reviewing the number and type of assignments further, including the possibility of developing a transition assignment within the academic development module; producing 'meet your tutors' mini videos and an 'Introduce yourself' forum within Blackboard.

- Including new pathways for Law, Social Sciences and Humanities.

- Redeveloping the website to provide more information, a personal comment from the programme director and a twitter feed.

- Greater use of online submission of assignments and feedback to streamline the assessment process.

- Factoring in more time for personal tutors in order to account for the high degree of care involved.

There is no doubt that this course is challenging, particularly with regards to the very quick progression from arriving and settling in to submission of first assignments, plus the pressure of knowing that it is not possible to resit final modules. However, by ensuring that personal tutors were responsive to the expectations of international students, in conjunction with the integrated programme of modules, students managed the challenges and felt well-prepared for degree level study.

Caruana, V. (2011c). Internationalising the curriculum – exploding myths and making connections to encourage engagement invited contribution to the HE Academy Teaching International Students Project, The International Student Lifecycle Resource Bank. Available at: http://www.heacademy.ac.uk/assets/documents/internationalisation/Viv_Caruana_leeds_Met.pdf

Hoodith, D. (2013). The shift to subject-based content in EAP/Science. *InForm, 11*, 5–6.

Kuznetsov, A. (2011). Looking for ways to increase student motivation: internationalisation and value innovation. *Higher Education Quarterly*, 65(4), 353–367.

McNorton, H. and **Cadinot, S.** (2012). Enhancing the international foundation programme student experience: staying ahead of the game. *InForm, 9*, 5–8.

Rathje, S. (2007). Intercultural Competence: The Status and Future of a Controversial Concept. *Journal for Language and Intercultural Communication*, 7(4), 254–266

Embedding language learning strategies within a Foundation chemistry course using the FOCUS project

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This article outlines the development of a corpus of good quality student texts in chemistry (The FOCUS project) and how it has been used to develop language understanding within a foundation Chemistry course. The functionality of the concordancing tool is explained with practical examples of teaching activities that have been developed.

The article by Gillway in the April 2012 issue of Inform (Gillway 2012) provided an excellent insight into the multiple language challenges faced by students during a chemistry lecture. It is these subject specific language challenges that have been the focus of our own teaching research for the past two years. During this time we have explored a variety of teaching and learning resources to help students and lecturers develop their understanding of subject specific language (Rees et al. 2013). This article outlines the development of a corpus of good quality student texts in chemistry (The FOCUS project) and how it has been used to develop language understanding within a foundation Chemistry course.

The FOCUS project

The combined skills and knowledge of a chemistry specialist (Simon Rees) and an EAP specialist (Megan Bruce) have led to the development of a suite of resources entitled the FOCUS project (www.community.dur.ac.uk/ foundation.focus). The FOCUS project (abbreviated from Foundation Corpus) is a substantive and growing collection of high quality Durham student writings from Foundation level (level 0) to Ph.D. in Chemistry (and now expanding in to other subject areas). The intention has been to develop this as a teaching resource to enable students to participate in data driven learning activities as described by Johns (1991). The corpus contains over 1000 individual texts and figures and these can be searched by students to examine the usage of specific words in context. For example, if the user searches for the word 'molecule' they will obtain results displayed as below (see Fig. 1 below).

Aside from displaying the word in context, the corpus search also reveals the level of work from whicht the example was obtained, for example, level 1 – 1st year undergraduate, the type of writing, for example, laboratory report and the subject, for example, chemistry, earth sciences. Users can also sort the data alphabetically using the 'Before' or

Figure 1. Results for a search for the use of term 'molecule'.

'After' tabs to identify common collocations, wild card entries can be made and there is also a word cloud feature that displays words most commonly associated with the search term (see Fig. 2.). A screencast explaining the functionality of the corpus is available to view at http://www.youtube.com/watch?v=Tin5hNG7ILM

Figure 2. Word cloud displaying words most frequently associated with the search term 'molecule'.

Teaching with FOCUS.

Having built the collection of texts and the concordancing tool, the next challenge has been to develop teaching activities to make use of the tool within the Chemistry course. These have included the following:

Pressure? You don't know the meaning of pressure!

In response to this question, a class may be observed reaching for their smartphones and other devices, typing the word in to a search engine and producing a response along the lines of something to do with an amount of force over a given area. This is a definition of the word in isolation but only provides a very limited understanding of the meaning and usage of the word in a chemistry context.

The students are then asked to enter the word in to FOCUS and search chemistry texts. By clicking on the 'before' tab, the search returns 343 results which are then sorted alphabetically by the word immediately preceding 'pressure'. The trained user of this tool, quickly recognises common collocations with the word 'pressure' such as 'exerts a pressure', 'temperature and pressure' and 'high' and 'low'. This evidence is supported by the word cloud where gas, temperature, surface and container are the largest and hence the most frequent words. The search also identifies a number of different types of pressure e.g. partial, transmembrane, radiation and osmotic. The meaning of these specific types of pressure can then be explored. Furthermore, a search within a different subject area can reveal results with similarities and differences e.g. a search in Earth Sciences texts reveals the common occurrence of hydrostatic, lithostatic and pore pressure. This can then promote a valuable discussion amongst a mixed discipline group of students with regard to the subject specific usage of a word.

Consequently, the learner, in a short amount of time, has undertaken some language research that has quickly exposed them to a rich and diverse sample of sentences. The value of this teaching activity is enhanced by the use of authentic chemistry texts and the fact that it promotes learner discovery of the connections between words and their meaning.
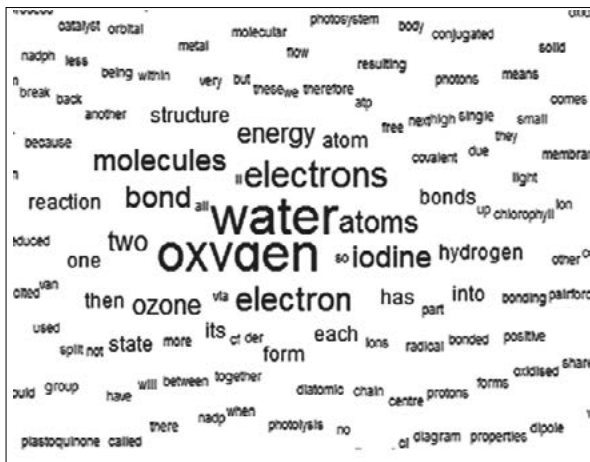
Spontaneous searches.

On a regular basis, classroom discourse can involve discussion of the meaning of new and unfamiliar terms and the availability of FOCUS has enabled the chemistry tutor to spontaneously search for terms that come up during lessons to illustrate the different contexts in which they are used. For example, the usage of the term 'homologous' was explored and very quickly its usage in three different contexts was identified (homologous series, homologous genes, homologous evolutionary features). The embedding and repeated usage of the resource within class helps familiarise students with the resource and its value and in developing their understanding of scientific language.

Personalised glossaries of specialist vocabulary.

As the term has progressed, international students have developed a bank of explanations and examples of difficult terminology that they have come across. For example, a student did not understand the meaning of the word 'contract' so he was asked to look up a definition of the word (which he does on his smartphone). This revealed many different meanings of the word for different contexts. By then searching for the word in FOCUS, an example in context is identified and then the most appropriate meaning of the word can be established (see Figure. 3, next page). This example illustrates the linguistic complexity of this challenge where the word is polysemous in its usage in science. This activity has enabled us to explore how students seek definitions of new vocabulary and the suitability of the dictionaries or other tools they are using.

Self-study activities

The FOCUS project is designed to be student orientated so that students can explore language usage in their disciplines. Early on, however, it became clear that students were struggling, (understandably) to perceive exactly what the concordance programme could do and how they could use it in their learning. The tool can be used effectively in class with the tutor leading the discussion and exploring the results with the students but we wished to encourage and enable students to undertake explorations independently.

Consequently, a range of self-study activities have been developed to explore different aspects of scientific language (http://community.dur.ac.uk/foundation.science/?q=node/490). These include activities on: scientific affixes, writing laboratory reports and words with multiple meanings.

| Contract | **n.**
1. a binding agreement between two or more persons that is enforceable by law
2. (contract bridge) the highest bid becomes the contract setting the number of tricks that the bidder must make
3. a variety of bridge in which the bidder receives points toward game only for the number of tricks he bid
v.
1. enter into a contractual arrangement
2. engage by written agreement
3. squeeze or press together
4. become smaller or draw together
5. be stricken by an illness, fall victim to an illness
6. make smaller
7. compress or concentrate
8. make or become more narrow or restricted
9. reduce in scope while retaining essential elements
vi. 收缩；感染；订约
vt. 感染；订约；使缩短 | The graphene capillaries will expand or contract depending on localised humidity to allow water and nothing else through |

Figure 3. The student was asked to find the correct definition for the word 'contract' in relation to an example in context obtained from FOCUS (final column). Definitions sourced from www.youdao.com.

The benefits of the FOCUS project to teaching and learning.

The incorporation of these activities has had several benefits on teaching and learning such as; the use of authentic student texts to reinforce how language is used within a subject area, the user is exposed to a large number of uses of the word so that they can deepen their understanding of correct language usage, the tool encourages students to develop their independent research skills through data driven learning and student writings can be reused to illustrate appropriate language usage without compromising academic integrity or the potential for plagiarism,.

The FOCUS project is continuing to develop and we are expanding in to other subject areas. We would welcome enquiries from colleagues in other institutions who would be interested in trialling and evaluating its use.

Gillway, M. (2012). Making the language of lectures accessible to international students: The case of chemistry. *Inform*, 11–12.

Johns, T. (1991). Should you be persuaded – Two samples of Data-Driven Learning Materials. *ELR Journal*, 4, 1–16.

Rees, S. W., Bruce, M. & **Nolan, S.** (2013), Can I have a word please – strategies to improve understanding of subject specific language in non-traditional students studying foundation chemistry. *HEA: New Directions*., 9. Issue 1.
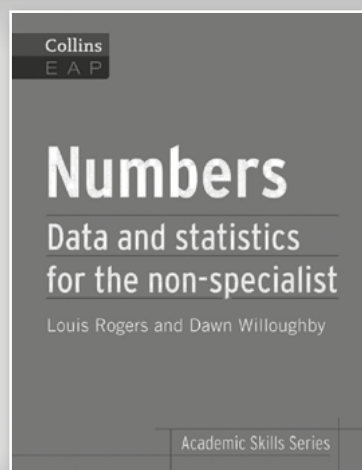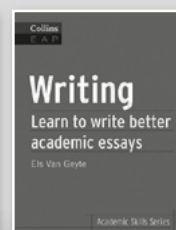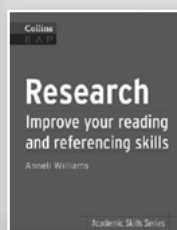
Call for papers

This is a call for papers for Issue 14 of *InForm*.

The submission of papers is now invited for the fourteenth edition of *InForm* from members of the academic community associated with international foundation programmes. Issue 14 will be published in October 2014.

We are interested in articles related to the variety of academic disciplines commonly found across international foundation programmes and remind contributors that *InForm* is not predominantly an English language teaching journal. *InForm* also includes a letters page with readers' responses to the articles included in previous editions. Letters should be no longer than 200 words.

Journal articles (of no more than 1200 words) should be sent by email to **inform@reading.ac.uk** by 12.00 pm on 31 July 2014.

For more information and a full writer's guide please visit:
www.reading.ac.uk/inform

We regret that contributing authors to *InForm* will no longer receive payment for papers published.

If you wish to discuss an idea for an article, please email us on **inform@reading.ac.uk**

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