

"I miss being spoon-fed". A comparison of transition from school to university education from the perspective of undergraduate pharmacy students

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Abstract

Background: The transition from school to university can be challenging and there is increasing concern among academics that students are inadequately prepared for entry to university courses.

Aims: To investigate students' views on transition from school to university education.

Method: A focus group was conducted with first-year students and analysed using thematic analysis. Students were invited to participate in an electronic questionnaire; responses were analysed via SPSS for Windows. The Mann–Whitney U test was utilised with p<0.05 set as significant.

Results: A response rate of 60% (88/147) was obtained for the questionnaire. Differences included staff-student interactions, learning methods, examination preparation and feedback provision. Many (85%) agreed that the main emphasis in school was on examination preparation; 29.6% considered this to be the case at university (z=-8.315; p<0.05). Most students (95.4%) considered the feedback they received at school helped improve performance; this decreased to 50% when asked about feedback at university (z=-8.326; p<0.05).

Conclusion: Students appear to be insufficiently prepared for the demands of higher education. They desire various aspects of their university educational experience to be more akin to that of school, including: a greater level of individual attention, increased access to teaching staff, and further clarification and transparency about the standard required to pass exams. Further work can now be done by academic staff to aid the transition and improve the learning experience.

Keywords: higher education, pharmacy, qualitative, questionnaire, transition

Introduction

Between 1995 and 2009, entry rates for university courses increased by nearly 25% across Organisation for Economic Co-operation and Development (OECD) countries (OECD, 2011). However, recently in the United Kingdom (UK), the number of students starting university has decreased, possibly due to the introduction of annual fees of up to £9000 (Times Higher Education, 2012). While high rates of student admittance into university may be desirable, it is essential to retain students once they are enrolled. Retention rates are important (Association of American Colleges and Universities, 2013; European Higher Education Area, 2013; Higher Education Academy, 2013) and attrition can be costly for both universities and individuals. Withdrawing from a university course can lead to a sense of personal failure, not to mention untapped potential. Rausch and Hamilton (2006) noted that the greatest loss occurred during the first year, typically during the first semester. If students successfully finish their first year, this is a useful predictor in terms of the likelihood of them completing the whole degree (Tinto, 1988).

There has been increasing concern among academics that students are inadequately prepared for entry to university courses (Trotter & Roberts, 2006). A survey conducted in the USA, involving over 170,000 school students, concluded that there was a serious disparity between students' current learning habits and those expected of them at university (McCarthy & Kuh, 2006). Additionally, in Australia, a series of studies involving up to nine universities has been conducted with first-year university students at five yearly intervals from 1994-2009 (James *et al.*, 2010). The latest study (2009; n=2422) revealed that for every course contact hour, students spent less than one hour of study time outside of class. Furthermore, one in three students scored a lower mark than expected for the semester and 40% of student participants agreed the standard required at university was higher than anticipated (James *et al.*, 2010).

Obtaining information on students' experiences and perceptions of their first year of university is of great importance for retention, academic success, and the development of lifelong learning. While there has been work done in this area, it is limited with regard to pharmacy undergraduate students and UK students (Yorke & Longden, 2007). As future healthcare professionals, it is vital that they can make a successful transition to university and develop skills to enable them

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to be self-directed, life-long learners. Furthermore, continuing professional development (CPD) is a statutory requirement for pharmacists in the UK (General Pharmaceutical Council, 2011; Pharmaceutical Society of Northern Ireland, 2013). The aim of this study was to investigate students' views on their transition from school to university to inform future educational practice.

It is anticipated that this research will be of value to those who teach first-year students and prepare degree programmes. In a wider context, it should be of interest to educators who prepare students for entry to university, to university leaders, and to employers who require graduates to be autonomous learners. It employs both qualitative and quantitative methodology to enhance the validity of the findings and various implications for practice are included within the discussion.

Methods

Following ethical approval [granted by the School of Pharmacy Ethics Committee; January 2012 (qualitative work); January 2013 (quantitative work)] and two pilot studies, research was conducted with first-year pharmacy undergraduate students at Queen's University Belfast on the transition to university education.

Qualitative research

A focus group was conducted to explore students' views on university education in comparison to school. Using the RAND function within Microsoft Excel[®], ten students' names were randomly selected from the firstyear class list and invited to participate in the study via email; an information sheet and consent form were sent as attachments. Random sampling was chosen because it adds credibility (reduces bias) within small samples (Patton, 2002). The focus group was conducted in February 2012 and digitally recorded. Participants were reminded that their names would not be linked to any comments nor appear on any publication resulting from the work. The interview was based on the topic guide (Figure 1), in addition to any additional issues raised by the participants. The guide was developed by reference to relevant publications (Leckey & Cook, 1999; Yorke & Longden, 2007; Johnston & Kochanowska, 2009; James et al., 2010) and discussions within the research team.

Figure 1: Topic guide for the focus group

Previous (school) experience of education and assessment procedures

Students' expectations of university education prior to starting

Students' experiences of university education (and academic performance)

How expectations of university education aligned with experiences

Whether university education could be improved

The recording was transcribed verbatim by one researcher (SD) and checked for accuracy by a second researcher (LH). It was read on a line-by-line basis and text that represented a particular idea or concept was given a code (Strauss & Corbin 1998). The transcript was independently analysed by the second researcher (LH) and the emerging themes were finalised by discussion between the two researchers.

Quantitative research

A questionnaire (see Appendix A) was developed based on findings from the qualitative work and the wider literature (Yorke & Longden, 2007; James et al., 2010; Higher Education Academy, 2013). SurveyGizmo (www.surveygizmo.com; Boulder, Colorado) was used to create the electronic version. It consisted of four sections: student's views of school education; student's views of university education; the transition from school education to university; and demographic data (no identifiable information). Most questions (13) contained attitudinal statements with responses given on a five-point Likert scale ("strongly agree" to "strongly disagree") and there were four open-response questions. In addition to piloting, the questionnaire was internally reviewed for content validity by an expert in the field and assessed for face validity by colleagues.

In February 2013, all first-year students (n=147) were invited by email to participate (this contained a unique link to the questionnaire which allowed each student to complete it once only). Students were given 21 days to complete the questionnaire and, to increase response rates, two reminder emails were sent to non-respondents and included a statement that other students had already responded (Edwards *et al.*, 2009). With the questionnaire software, it is possible to send reminders to nonrespondents only, without compromising anonymity. Other methods used to maximize the response rate included ensuring the questionnaire was relatively short, had a simple header, and appeared against a white background (Edwards *et al.*, 2009).

Responses were coded and entered into SPSS for Windows, version 19 and the Mann–Whitney U test was used to test for association between responses. Subanalyses were performed (questions relating to school versus questions relating to university). An a priori level of less than 0.05 (p<0.05) was set as significant and differences meeting this criterion are reported in the Results section. Missing data were not estimated or used in analyses. The free response questions were analysed using thematic analysis (Ezzy, 2002).

Results

Six first-year students (four females, two males) participated in the focus group, which lasted for 52 minutes. Quotations have been chosen to represent a particular concept; we aimed to select those that made the point succinctly; 'S1' refers to a verbatim quotation provided by 'Student 1'.

The response rate for the questionnaire was 59.9% (88/147); 76.1% (67/88) of the respondents were female and 23.9% (21/88) were male. This ratio was similar to population of students enrolled in the first-year of the pharmacy degree program (70.1% [103/147] female; 29.9% [44/147] male). The number of respondents (n=88) relates to students who fully completed the questionnaires. Another two questionnaires were partially completed but as demographic information was missing and only a few questions answered, these were not included in the analyses.

Preparation and transition to university

Just over a quarter of respondents (26.2%) were in agreement that the way they were taught at school had adequately prepared them for university; 39.8% considered that the transition from school to university was difficult. Reasons centred on the teaching methods used at university; lack of feedback, larger class sizes and impersonal relationships with academic staff. These findings were echoed in the qualitative work and are expanded upon throughout.

Learning environment

Focus group students thought that large class sizes at university prevented them from asking questions:

"If it's more like a class [similar to school], you're not afraid to [ask questions]. You can't put your hand up in a lecture!" (S5)

Teaching methods

Students were asked about directed and self-directed learning at school and university (Figure 2).



Figure 2: Students' views on teaching methods

In the focus group, students commented that only a few teachers had tried to teach them how to be independent learners:

"*A few [teachers] were like 'you have to figure this out for yourself'...*" (S1)

Students found the self-directed learning approach at university challenging, especially as it was an expectation from the outset and noted that it required motivation:

"I miss being spoon-fed!" (S4)

"You have to motivate yourself a lot more." (S2)

Some also commented on the complexity of the material at university and the volume of work. A few students queried the relevance of some of the material taught at university:

"In school everything was almost 'dumbed down'...." (S5)

"So much information in one lecture. You maybe would have covered the same amount in school in a week." (S2)

Most of the participants preferred active to passive learning at university.

"Some of the lecturers will do something interactive and you have to be involved. Otherwise, you just drift off and you're not really concentrating." (S2)

Nearly all respondents (97.8%) were in agreement that the majority of teaching at school was clearly mapped to a course syllabus. In comparison, only 26.1% were in agreement that the majority of teaching at university was clearly mapped to a course syllabus (z=-10.078; p<0.05). These findings were echoed in the focus group.

"In our school, you follow the specification and you know what is going to be asked." (S5)

Some focus group participants also commented that they wanted more continuous and diagnostic assessments at university, rather than just a final exam at the end of the semester:

"We had loads of class tests...they were really helpful because you kind of had to keep on top of it." (S2)

Examination preparation

Eighty-five point two percent were in agreement that the main emphasis in school was on preparation for examinations; 29.6% were in agreement that the main emphasis at university was on preparation for examinations (z=-8.315; p<0.05). Moreover, 89.8% considered that their teachers in school ensured they were adequately prepared for examinations but only 56.8% thought that academic staff at university did this (z=-6.925; p < 0.05). Only 28.4% were in agreement that they knew how to perform well in university examinations. Some thought that staff provided very little advice on depth of answers and time management. Several focus group participants wanted guidance on how to answer questions, explanations of how marks were allocated, and to see what a good answer looks like in comparison to an excellent answer.

Feedback provision

The vast majority of respondents (95.4%) were in agreement that the feedback they received at school helped them to improve their performance. However, only 50% of respondents were in agreement that the feedback they had received at university had helped them to improve their performance (z=-8.326; p<0.05). Inconsistencies in feedback provision and a lack of constructive comments were mentioned:

"You're not really told what else you should include or how to make it better... [at school] we would go up to the teacher and talk about what we'd done and what we needed to improve." (S6)

Student-staff interaction

The majority (93.2%) were in agreement that teachers at school dealt with queries in a satisfactory manner whereas 72.8% were in agreement that academic staff at university dealt with queries in a satisfactory manner (z=-5.660; p<0.05). Some students thought that answers to questions were "blunt", explanations "brief" and that certain academic staff were "very unapproachable".

Focus group participants considered that they had a different relationship with teachers at school because they were with the one teacher for longer periods of time. They reported that communication between staff and students was more of an issue at university:

"You just don't know the lecturers on the same level." (S1)

"You might want a bigger chunk of [their] time rather than a quick email." (S3)

Discussion

Students appear to be insufficiently prepared for the demands of higher education, which reflects findings from studies conducted in the United States on 'collegereadiness' (Moore et al., 2010) and 'academicreadiness' (Barnes et al., 2010). Almost 60% of our respondents classified their learning at school as being mainly directed; one participant in the focus group thought that school material was 'dumbed-down'. These findings are echoed by Keane (2011) where students described school learning as heavily monitored, individually supported and in many instances involving being effectively 'spoon-fed' information. Additionally, higher level skills (such as problem-solving and critical thinking) did not appear to be nurtured, as one participant described the learning style as "read, remember, regurgitate" (Keane, 2011). The prevalence of selfdirected learning in tertiary level education and among healthcare-related disciplines is linked to its perceived benefits over directed learning (Gureckis & Markant, 2012). Some of the students in the focus group noted that there was an expectation that learning had to be selfdirected from the outset. While autonomous learning is vital, and a realistic expectation for learners in higher

education, perhaps gradually increasing the complexity of tasks over the first semester of university (and starting with group activities) could help the students to move from directed to self-directed learning with more confidence and ease.

Students specifically singled out larger class sizes as a reason for a difficult transition to university education. Steinert (2004) found that small group teaching provided students with opportunities to ask questions, to work as part of a team, and to learn how to problem-solve. Whilst small group teaching (such as tutorials and workshops) does occur in the School of Pharmacy, more of these types of classes may be beneficial (Brown & Atkins, 1988), particularly in the early stages of the degree programme. Our students also found it difficult to remain focused in lectures that involved only passive learning. Brown and Atkins (1988) highlight the benefits of active learning, which include improving students' focus and encouraging understanding. An increase in the amount of active learning opportunities (via workshops, tutorials, practical classes and interactive lectures) and ways to assess performance at more regular intervals during each semester should be considered.

The university syllabus was seen as being inadequate in the eyes of the students, whose expectations were based upon school experience. Work could be done within the pharmacy program to improve the syllabus; its importance as a learning tool is widely noted in the literature (Slattery & Carlston, 2005; Calhoon & Becker, 2008; McDonald, 2010). It may be beneficial for academic staff and student representatives to develop such a syllabus together to ensure the design has pedagogical applications and meets the needs of the student and staff body. However, it should be noted that for accredited courses such as the pharmacy degree programme in the UK, many of the requirements are stipulated by the accrediting body (General Pharmaceutical Council, 2013).

Over 85% of respondents were in agreement that the main emphasis in school was on preparation for examinations, compared to less than a third of respondents who were in agreement that this was the case for university. Torrance (2007) considers the emphasis in secondary education has shifted from 'assessment of learning' to 'assessment for learning' to 'assessment as learning'. He warns that while this shift in focus on examinations has certainly enabled greater numbers of learners to achieve awards, it has resulted in a reduction in the quality of the learning experience and produced students who are more dependent on their tutors. Our students also stated that examination preparation was difficult because there were no model answers for past examination paper questions. If students are unsure as to what is required of them, they will be less able to align their performance to that which is expected of them by staff. A number of approaches could be introduced to improve this, including using better definitions of requirements and providing exemplars of work with feedback attached (Nicol & MacFarlane-Dick, 2006).

Feedback provision appears to be less than satisfactory. Prompt and constructive feedback, particularly in the first year, is important in increasing student retention (Yorke & Longden, 2007). Feedback early in the semester can also help relieve student anxiety, provide a sense of achievement (Kift & Moody, 2009) and also develop an understanding of the standard of work required. Others consider that if feedback is not provided within healthcare disciplines 'mistakes go uncorrected, good performance is not reinforced and clinical competence is achieved empirically or not at all.' (Ende, 1983). Two of the authors have conducted research within the university on feedback provision (Hall *et al.*, 2012; Hanna *et al.*, 2012) and it is anticipated that this will be instrumental in helping to address deficiencies within the School.

Students identified communication issues with academic staff. However, they may have high expectations with respect to promptness and comprehensiveness of the response they receive to queries; expectations that academic staff members may neither share nor be able to meet due to pressures to produce high-quality research in tandem with extensive teaching responsibilities. Perhaps if staff reviewed the queries they received from students during the past 6-12 months, changes could be implemented for the next cohort of students. Additionally, if the syllabus was sufficiently detailed and adequate resources and feedback were provided, the number of individual queries from students may diminish.

In terms of limitations to this study, only six students participated in the focus group and data were collected when first-year students had only completed 2.5 modules and undertaken one set of examinations. The response rate to the questionnaire (60%) was reasonable; however, the possibility of bias due to non-response cannot be ignored (Babbie, 2007). Similarities in findings were noted between this work and other studies documented in the literature. The study sample was similar to the overall first-year MPharm student population in terms of gender, which enhances the generalizability of the findings. Furthermore, while the research was conducted with pharmacy students, many of the findings have relevance for other higher education settings.

Conclusion

Students appear to be insufficiently prepared for the demands of higher education. They desire various aspects of their university educational experience to be more akin to that of school, including a greater level of individual attention, increased access to teaching staff, and further clarification and transparency about the standard required to pass exams. Further work can now be done by academic staff to aid the transition and improve the learning experience.

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Declaration of Interest

The authors have no conflicts of interest to report.

References

Association of American Colleges and Universities (2013) High-Impact Educational Practices. Resource document (on-line). Available at: <u>www.aacu.org/leap/hip.cfm</u>. Accessed 9th August, 2013.

Babbie, E. (2007) The Practice of Social Research, 11th ed. California: Thomson Wadsworth.

Barnes, W., Slate, J. & Rojas-Lebouef, A. (2010) Collegereadiness and academic preparedness: the same concepts? *Current Issues in Education*, **13**(4), 1-28.

Brown, G. & Atkins, M. (1988) Effective Teaching in Higher Education. London: Methuen and Co. Ltd.

Calhoon, S., & Becker, A. (2008) How Students Use the Course Syllabus. Resource document. *International Journal for the Scholarship of Teaching and Learning*. **2**,1-12.

Edwards, P.J., Roberts, I., Clarke, M.J., Diguiseppi, C., Wentz, R., Kwan, I. & Cooper, R. (2009) Methods ti increase response rates to posteal questionaires. *Cochrane Database of Systematic Reviews*, 8;(3), MR000008.

Ende, J. (1983) Feedback in clinical medical education. *The Journal of the American Medical Association*, **250**(6), 777-781.

European Higher Education Area (2013) EHEA archive: education, research and innovation. Resource documents (on-line). Available at: <u>http://www.ehea.info</u>/. Accessed 15th August, 2013.

Ezzy, D. (2002) Qualitative analysis: practice and innovation. Crow's Nest: Allen and Unwin.

General Pharmaceutical Council (2011) Plan and record (on-line). Available at: <u>http://www.pharmacyregulation.org/sites/default/files/GPhC%20Plan%20and%20Record %20g.pdf</u>. Accessed 10th August, 2013.

General Pharmaceutical Council (2013) Approval of courses. Resource documents (on-line). Available at: <u>http://www.pharmacyregulation.org/education/approval-courses</u>. Accessed 10th August, 2013.

Gureckis, T.M. & Markant, D.B. (2012) Self-directed Learning: a cognitive and computational perspective. *Perspectives on Psychological Science*, 7(5), 464-481.

Hall, M., Hanna, L-A. & Quinn, S. (2012) Pharmacy students' views of faculty feedback on academic performance. *The American Journal of Pharmaceutical Education*, **76**(1), 5.

Hanna, L-A., Hall, M. & Hennessey, J. (2012) An exploration of feedback provision in a pharmacy degree programme from students' perspectives. *Pharmacy Education*, **12**(1), 10-13.

Higher Education Academy (2013) Retention and Success. Resource documents (on-line). <u>http://</u><u>www.heacademy.ac.uk/retention-and-success</u>. Accessed 9th August, 2013.

James, R., Krause, K-L. & Jennings, C. (2010) The First Year Experience in Australian Universities: findings from 1994 to 2009. Resource document. Centre for the Study of Higher Education (on-line). Available at: <u>http://</u> www.cshe.unimelb.edu.auresearchFYE_Report_1994_to_ 2009.pdf. Accessed 9th August, 2013.

Johnston, B. & Kochanowska, R. (2009) Students expectations, experiences and reflections on the first year. Glasgow. Quality Assurance Agency 2009 (Scotland).

Keane, E. (2011) Dependence-deconstruction: widening participation and traditional-entry students transitioning from school to higher education in Ireland. *Teaching in Higher Education*, **16**(6), 707-718.

Kift, S.M. & Moody, K.E. (2009). Harnessing assessment and feedback in the first year to support learning success, engagement and retention. Resource document. ATN Assessment Conference 2009 Proceedings, RMIT University, Melbourne (on-line). <u>http://eprints.qut.edu.au/</u> 28849/1/28849.pdf. Accessed 9 August 2013.

Leckey, J. & Cook, A. (1999) Do expectations meet reality? A survey of changes in first-year student opinion. *Journal of Further and Higher Education*, **23**(2), 157-171.

Moore, G.W., Slate J.R., Edmonson, S.L., Combs, J.P., Bustamante, R. & Onwuegbuzie, A.J. (2010) High school students and their lack of preparedness for college: a statewide study. *Education and Urban Society*, **42**(7), 817–838.

McCarthy, M. & Kuh, G.D. (2006) Are students ready for college? What student engagement data say. *Phi Delta Kappan*, **87**(9), 664–669.

McDonald, J., Siddall, G., Mandell, D. & Hughes, S. (2010) Two-sides of the same coin: student-faculty perspectives of the course syllabus. In *Collected Essays on Teaching and Learning* [CELT] (eds. W.A. Wright, M. Wilson & D. McIsaac) 3rd ed. Hamilton, Ontario: Society for Teaching and Learning in Higher Education. pp. 112-118.

Nicol, D.J. & MacFarlane-Dick, D. (2006). Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, **31**(2),199-218.

OECD (2011) Education at a Glance. OECD Indicators C2: How Many Students Will Enter Tertiary Education? Resource document (on-line). Available at: <u>http://www.oecd.org/education/skills-beyond-school/48631070.pdf</u>. Accessed 9th August, 2013.

Patton, M.Q. (2002) Qualitative research and evaluation methods, 3rd ed. California: Sage.

Pharmaceutical Society of Northern Ireland. (2013) Continuing professional development (on-line). Available at: <u>http://www.psni.org.uk/cpd/continuing-professionaldevelopment/</u>. Accessed 10th August, 2013. Rausch, J.L. & Hamilton, M.W. (2006) Goals and distractions: explanations of early attrition from traditional university freshmen. *The Qualitative Report*, **11**(2), 317–334.

Slattery, J.M. & Carlson, J.F. (2005) Preparing an effective syllabus: current best practices. *College Teaching*, **53**(4), 159-164.

Steinert, Y. (2004) Student perceptions of effective small group teaching. *Medical Education*, **38**(3), 286-293.

Strauss, A.L. & Corbin, J. (1998) Basics of qualitative research: techniques and procedures for developing grounded theory, 2nd ed. California: Sage.

Times Higher Education (2012) "*Figures reveal huge drop in students starting university*" (on-line). Available at: <u>http://www.timeshighereducation.co.uk/421152.article</u>. Accessed 9th August, 2013.

Tinto, V. (1988) Stages of student departure: Reflections on the longitudinal character of student leaving. *Journal of Higher Education*, **59**(4), 438-455.

Torrance, H. (2007) Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education: Principles, Policy and Practice*, **14**(3), 281-294.

Trotter, E. & Roberts, C.A. (2006) Enhancing the early student experience. *Higher Education Research & Development*, **25**(4), 371–386.

Yorke, M. & Longden, B. (2007) The first-year experience in higher education in the UK. Report on Phase 1 of a project funded by the Higher Education Academy. York: Higher Education Academy.

Appendix A: The questionnaire

(*NB* This is not how the questionnaire appeared online - it is the version that was submitted to the ethics committee).

Introduction page

At this stage you have completed half of your Level 1 year and have just recently finished your first set of university exams. The following questions relate to your experience of school, your views on the transition from school to university and what you have thought of the academic university experience to date.

Please read the following statements which explain what is meant by self-directed learning and directed learning. They will help you to accurately answer the following questions.

Self-directed learning is when you take the initiative in deciding what you need to learn to achieve the goals that you set; you are proactive in getting materials and information that you need, how you use them and assessing if you have met the goals you set yourself.

Directed learning is where an instructor controls what is learnt, telling you what you need to know. The instructor is the driver for your learning and ensures that you cover all the material they think you need to know.

Section A Your educational experience at school.

The following questions relate to your educational experience of secondary education.

1. Please select one of the following options:

My learning was mainly

() Directed

- () Self-directed
- () Directed and self-directed

2. The feedback I received helped me to improve my

- performance
- () Strongly agree
- () Agree () Neither agree nor disagree
- () Disagree
- () Strongly disagree

3. Teachers dealt with queries in a satisfactory

- manner
- () Strongly agree
- () Agree () Neither agree nor disagree
- () Disagree
- () Strongly disagree

4. If strongly disagree or disagree selected Please explain why not:

Consider the following statements relating to examinations:

5. The majority of teaching was clearly mapped to a course syllabus

- () Strongly agree
- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

6. The main emphasis was on preparation for examinations

() Strongly agree

- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

7. My teachers ensured I was adequately prepared for examinations

() Strongly agree

- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

Section B University educational experience

The following questions relate to your educational experience on the MPharm degree.

8. My learning is mainly:

- () Directed
- () Self-directed
- () Directed and self-directed

9. The feedback I have received has helped me to improve my performance

- () Strongly agree
- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

10. Academic staff deal with queries in a satisfactory manner

- () Strongly agree
- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

11. If strongly disagree or disagree selected

Please explain why not:

Consider the following statements relating to assessment:

12. The majority of teaching is clearly mapped to a course syllabus

- () Strongly agree () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

13. The main emphasis is on preparation for

- examinations
- () Strongly agree () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

14. Academic staff ensure I am adequately prepared for examinations

- () Strongly agree
- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

15. If strongly disagree or disagree selected

Please explain why not:

16. I know how to perform well in

- assessments
- () Strongly agree () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

Section C The transition from school education to university

17. I expected my learning at university to be mainly:

- () Directed
- () Self-directed
- () Directed and self-directed

18. The way I was taught at school has adequately prepared me for university teaching

Thank you for taking our survey. Your response is very important to

- () Strongly agree
- () Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

19. The transition from school to university was difficult

() Strongly agree

() Female

us.

- () Agree
- () Neither agree nor disagree () Disagree
- () Strongly disagree

20. If strongly agree or agree selected

Please explain why not:

Section D- Demographic information

21. Please select your gender () Male