

Research Project Final Report

**Exploring attributes of academic departments in South African universities:
potential for professional development**

Andy Buffler

Department of Physics, University of Cape Town

Abstract

The academic department remains the dominant operational unit in our system of higher education and is largely responsible for delivery of the university's core business of teaching and research. The process of identifying attributes of academic departments is explored as a potential framework for professional development. Three main themes associated with the functioning of academic departments were established which may serve as useful points of departure for both individual and group professional development within higher education.

Introduction

The population of South Africa now approaches 50 million people, and more than two decades into the new democracy, participation rates in higher education continue to be low, coupled to poor throughput (CHE, 2013). Incoming university student populations feature increasing levels of social, educational and financial stress. Issues of transformation and funding feature significantly on the higher education landscape and presently flavour nearly all aspects of academic discourse in South Africa.

Many disciplines, such as physics, have linked programmes of teaching and learning reform into the established education research community in that discipline. Science education has a strong international research community into which the South African context is well connected. Organizations such as the Southern African Association for Research in Mathematics, Science and Technology Education have continued to grow, and many discipline-based organizations such as the South African Institute of Physics have an education research and development themes (SAIP, 2013). However, most research and development in higher education (HE) teaching and learning has occurred at two levels: the design and evaluation of extended degree programmes which continue to play important roles at many universities as the primary mechanism for dealing with under-preparedness; and classroom or course innovation. Although useful, the impact of research and development in teaching and learning has not typically reached deeply into the fabric of academic departments. Course development has seldom found impact beyond the course in which the development took place.

The academic department remains the organizational unit at universities which is the primary academic custodian of the discipline. Although interdisciplinary and trans-disciplinary research and teaching is gaining more prominence it is unlikely that the role of the department will change significantly in the foreseeable future. Courses have codes which typically tie them to a department, and departments carry the academic responsibility for those courses. This includes the main responsibility for the delivery of the curriculum for each course. Different departments respond differently to their teaching responsibilities. The approaches that departments take to dealing with their own potential graduates and students in service courses will differ, and contribute to an overall "culture" of teaching in the department. The operational, social and academic paradigms within departments thus vary widely. The corporate vision of a department, or lack thereof, certainly impacts on all aspects of the department's activities.

The present project thus aims to inform conversations around the design of quality assurance (QA) procedures in South African HE, with an emphasis on academic staff professional development. The Council for Higher

Education (CHE) recently initiated a “Quality Enhancement Project” (QEP) which aims to “enhance student learning with a view to increasing the number of graduates with attributes that are personally, professionally and socially valuable” (CHE, 2016). The stated goals for the QEP are the enhancement of the quality of undergraduate provision, the enhancement of the quality of graduates, and a higher education system that is improving continuously as members of the higher education community collaborate to share good practice and solve shared problems. The key research questions for this project are thus framed against this landscape.

An example from the United States: the SPIN-UP project

There have been a number of research projects which have focussed on the role that the department can play in sustained reform of the academic project. One of the most influential within physics was the project Strategic Programs for Innovations in Undergraduate Physics (Hilborn and Howes, 2003) organized by the National Task Force on Undergraduate Physics in the United States. The project was undertaken in 2001/2002, partly as a consequence of the decline in the number of physics majors in the USA. The project identified a number of key attributes which defined “thriving” departments (SPIN-UP, 2003):

- A widespread attitude among the academic staff that the department has the primary responsibility for maintaining or improving the undergraduate program. That is, rather than focusing on the lack of students, money, space, and administrative support, the department initiated reform efforts in areas that it identified as most in need of change.
- A challenging, but supportive and encouraging undergraduate program that includes a well-developed curriculum, advising and mentoring, an undergraduate research participation program, and many opportunities for informal student-staff interactions, enhanced by a strong sense of community among the students and staff.
- Strong and sustained leadership within the department and a clear sense of the mission of its undergraduate program.
- A strong disposition toward continuous evaluation of and experimentation with the undergraduate program.

Research questions for the present project

The present project, which was seeded by the outcomes of the SPIN-UP project, thus aims to explore whether the notion of the attributes of a thriving academic department is a useful framework for professional development both for individual academics and groups such the departmental unit itself. The traditional metrics of teaching and learning success will continue to be used and regarded as being important by those who use them. These include, for example, pass rates in individual courses, throughput rates in degree programmes, and completion times. There are well-established mechanisms in place to collect and interpret these data, although these evolve with the prevailing policy paradigm of QA of the day. The research questions for the present project aimed to explore an alternative mechanism for teaching and learning QA within departments, and were thus formulated as:

1. Are there useful attributes which could be used to explore the effectiveness of academic departments at South African universities, particularly with respect to teaching and learning?
2. How may these attributes be used as a point of departure for both quality assurance and professional development of academic staff within departments?

Methodology

Data were collected via interviews with academic staff at UCT. An interview protocol was designed to allow participants to reflect upon their professional practice as academics. Following a number of pilot conversations the questions were refined and the interview schedule finalised as presented in the Appendix. The data and discussion presented here are based on eight full interviews: one Dean; one Deputy Dean; three HoDs; and three non-HoD colleagues. All the interviewees were from UCT and extended beyond the Faculty of Science and none were from my own department. Early on in the process it became evident that some of the responses were regarded as “sensitive” by the interviewees. In order to undertake an open discussion, I thus provided assurances that both the names of those interviewed and the full transcripts of the interviews would remain confidential: only high level categorizations illustrated by anonymised quotations would be published. Due to

the tight time constraints associated with academic programme at the end of 2015 and start of 2016, ethical clearance was not sought for this pilot study, and all interviewees were aware of this. The eight interviews which inform this study were transcribed and a categorization or “coding” scheme was allowed to develop from the data, through the application of a grounded theoretical framework (Strauss and Corbin, 1990). After the coding scheme was refined, each response item from the interviews was allocated to one of the three categories. About 80% of the responses could be allocated in this way.

Results

Three high level categories of attributes were extracted from the data and posited as a consequence of a process of iterative sorting:

1. Community of practice
2. Leadership and change
3. Interplay between teaching and research

Attributes associated with community of practice include a sense of a shared understanding of the nature of the discipline in the department, ownership of the department’s vision and strategy for growth, and how academic professionalism, responsibility and collegiality are manifested.

Examples of responses in this category were:

Well, you know, the more colleagues who share in the department’s vision and strategy the better. There is a stronger sense of team when the department agrees on the direction in which to pull.

There are days when I don’t understand my colleagues and the choices they make. Academia is full of prima donas with egos but there is space for this as long as no-one takes themselves too seriously.

A well-functioning department provides the space for everyone to flourish individually while also contributing towards a common goal.

Others noted more negatively:

The current pressures in our department have eroded collegiality completely.

The more demands that are made on our time, the more I find myself getting irritated with some of my colleagues. The little issues become way too important when you are stressed.

Themes associated with the category dealing with leadership and change included issues around trust, freedom of a department to define its own future, sharing of responsibilities, agency, and the different roles played by the leadership chain: HoD, Dean, and Executive. Responses included:

I trusted our previous HoD who was a senior professor. Our present HoD is younger and seems to be using the position to advance himself.

The university is being more and more managerial. In the “good old days” we regarded the university executive as colleagues. Now they are clearly bosses. We regard our HoD as colleague but how close are we until the HoD is also a boss and the department is a business unit?

I was very sceptical about the usefulness of a departmental strategic plan, but after we actually took the time and worked on it, I can see the value. Our HoD took the time and trouble to bring everyone on board.

Things are so bad in our department that there have been three formal grievance procedures in the last year. The divisions are so deep that I don’t know how they will ever be healed. I now hate coming to work.

The third category captures the attributes associated with the interplay between teaching and research, including the value systems associated with teaching and research, ownership of the curriculum of the teaching programme, and what is understood to be research-led teaching, for example:

It is not clear that our university values the pursuit of excellence in research in the same way as before. I feel uncertain about the value system that is emerging.

We are apparently embarking on a programme of transformation of our curricula. I am not sure what this means but I hope that it will be research-led.

We are told that if we want to be promoted then we need to be excellent teachers, but I look at who is being promoted and I see that they may well be good researchers but their teaching is clearly mediocre.

and

Our HoD is excellent. She encourages us to excel in our teaching and supports our innovations. I feel motivated to be part of our department.

These examples are chosen to be illustrative of the responses within the three categories, and are not exhaustive in their scope.

Discussion

There were two strands of inquiry in this study. Firstly whether themes of attributes could be identified which potentially could be useful to explore the effectiveness of academic departments at South African universities, and secondly whether these attributes could be used as a point of departure for both quality assurance and professional development. With respect to the first research question, the three main categories emerged fairly naturally from the data with about 80% of the responses being attributed to one or more of the categories. The three themes which were identified are of course not unique. An independent analysis of the data would likely yield a different set of categories. What may be concluded is that the responses to the questions posed were able to be themed according to the three categories. Furthermore, since the number of interviews were small, further subdivision of the responses within these categories proved to be unconvincing, but could be useful with a larger data set.

A few general comments on the interviews are in order. The study was challenged by being undertaken during a time of severe stress in Higher Education in South Africa (late 2015 into 2016) which resulted in the interviews being dominated by the events of the day. Furthermore these stresses ended up shaking some departments quite severely with the result that small fractures in departmental operations and relationships have become deep rifts. Many academics who were approached to be interviewed were nervous about expressing their views and were particularly fearful about their responses being misinterpreted and potentially racialised. The data presented here have thus been anonymised completely since assurances were given that the recordings and full transcripts of the interviews would remain confidential. The final set of interviews that were completed were fewer than originally hoped, as a consequence of time constraints and a need to fine-tune the approach to the interview. Most interviews required the interviewer to respond with follow-up questions in order to extract more specific responses. Furthermore, most of the interviewees found it remarkably difficult to talk about their professional relationship to their department. Apart from the specific consequences of the events of the last months, it was clear that this topic was not one which has been deeply articulated before to any great extent. Even heads of department were not easily able to talk about their practice as academic leaders. A recurring theme was one of talking about problems in the department: what was not working well, “difficult” colleagues, a perceived uneven distribution of workload, institutional turmoil, academic hierarchies, arcane curricula, conservative leadership, etc. Very few respondents were able to describe positive attributes of a successful department in any depth. Many proposed attributes such as “excellent research” or “good pass rates” rather than the conditions that allow a department to thrive.

Recommendations

This project should be regarded as exploratory and was undertaken to potentially inform the design of processes of institutional review and staff development, for example the CHE's "Quality Enhancement Project" (QEP). Although there are many efforts to enhance opportunities for interdisciplinary and cross-disciplinary teaching and research, the institutional unit of the academic department remains as the most prevalent collective for academic provision in our system.

It thus appears reasonable for a programme of institutional development to have a significant focus on staff development within an academic department. What is the role of the HoD? What are the roles that individuals should play with the departmental team for the department to be regarded as successful? What are the attributes of a successful or thriving department? The unpacking of these ideas appears to be potentially a very useful tool for professional development, and thus quality enhancement.

It is likely that stresses will grow on departments over the next decade. Successful departments will feature a strong sense of vision and common purpose. Perhaps HELTASA should initiate a new flavour of teaching and learning award which is bestowed upon departments which together should excellence in one or another sphere of the academic teaching project. This would reward best practice not only at the individual or course level, but at the department level, and highlight the value of teamwork and common vision.

Finally, it is possible that there not only particular sociologies that underpin successful academic departments, but perhaps philosophies of academic practice. Such philosophies are likely to be discipline-specific, or at least faculty-specific, and therefore themselves might allow different insights into approaches which lead to substantive reform in our system.

Acknowledgments

I sincerely thank the leadership of the HELTASA TAU programme, especially Brenda Leibowitz, for inviting me to participate over the last year, and allowing all of us to find our way in our own way. I am especially appreciative to our group leader Rejoice Nsibande for her extraordinary patience and useful insights, and the other members of our group André du Plessis and Thozama Mandindi for their contributions to our joint project. I also thank the University of Cape Town for nominating me for this unique opportunity.

References

- CHE. (2013). *A proposal for undergraduate curriculum reform in South Africa: the case for a flexible curriculum structure. Final report.* Pretoria: Council on Higher Education.
- CHE. (2016). Quality Enhancement Project of the Council on Higher Education. Available at: http://www.che.ac.za/focus_areas/quality_enhancement_project/overview [Accessed 29 May 2016].
- Hilborn, R.C. and Howes, R.H. (2003). Why many undergraduate physics programs are good but few are great. *Physics Today*, September 2003, 38.
- SAIP and CHE. (2013). *Review of undergraduate physics education in public higher education institutions. Final report.* Pretoria: South African Institute of Physics and the Council on Higher Education.
- SPIN-UP. (2003). *Strategic Programs for Innovations in Undergraduate Physics. Final report.* Available at: <http://www.aps.org/programs/education/undergrad/faculty/spinup/> [Accessed 29 May 2016].
- Strauss, A. and Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques.* Newbury Park: Sage.

Appendix: Interview schedule

Frontend. What is the purpose this discussion? What is the context? Explain RQs

What do you understand by the notion of the “academic project”? [Might need unpacking]

Why do we have academic departments?

Is there a better model?

Is an HoD essential? Why? Why not?

What is the role of the HoD with respect to the academic project?

What is your concept of a successful or thriving academic department?

For example, in a recent study in the United States (SPIN-UP) it was recognised that a thriving department is characterised by a strong sense of community amongst all its members (student and staff). Do you agree with this? Why, why not?

What is the nature of this community, in your opinion?

How does a department maximise opportunities for all its members (students and staff) to effectively contribute to this community?

What are the conditions in departments which enhance the collaborative growth of effective teaching and learning? Which conditions suppress effective T&L?

Can you enhance your answer to the above with some examples from your own experience?

What role should the research programme of the department play in PG and UG teaching?

Do you think that there are there tensions within the typical department between those who pursue “blue sky” and “applied” research? Are these tensions constructive or destructive in nature? Why?

How do you understand the role of transformation in the development of a thriving department?

How do you think the Oct/Nov student protest actions disrupted the academic project within departments?

Were these positive or negative disruptions? Can you illustrate your answer?

Epilogue. Anything else to add?