Abstract
This paper discusses the strategies and processes used within one Higher Education institution to support curriculum design and, change the culture around this activity. The paper provides a brief discussion of two institution wide projects related to curriculum design that have been taking place over the last few years and have been used to support this area of development. The discussion will then identify some of the issues around terminology and barriers to staff engaging in curriculum design as well as processes that had been used by staff and then move to discussing the strategies used to support this activity. Throughout the paper there will also be reference to comments gained from peers during the workshop that took place at the Eighteenth International Conference on Learning in Mauritius in July 2011.

Key Words
Curriculum design, Strategies for design, Barriers to curriculum design, Institutional change

Introduction
The two authors have been involved in projects that require institutional change for curriculum design. This required a range of activity to be undertaken because whilst the term “curriculum” might be familiar to educational developers many academics have a variety of definitions for this word (Fraser 2006). Barnett et al (2001) and Fraser (2006) believe that this is due to the limited discussion of this term in Higher Education. The authors therefore started by exploring what this term meant to academics and others involved in curriculum design thus enabling a definition to be developed which could then be tested amongst these staff.

In terms of the process of design, little is known about the detailed processes academics and others use when designing programmes and modules due to many institutions devolving this activity to individual faculties or Schools which is the case in the authors’ institution (Ziegenfuss & Lawler 2008). There was also some knowledge of the barriers to curriculum design but further exploration of these was needed. The authors collected as much data as possible about the processes and barriers in order to develop some strategies to assist staff in curriculum design and achieve a change in institutional culture.

The paper will provide a brief introduction to the two projects to set the scene and will then identify some of the issues around terminology, the barriers to design and some of the processes in use that then led to a range of strategies being implemented to support curriculum design. Throughout the paper there will be reference to comments collected at a workshop that took place at the Eighteenth International Conference on Learning in Mauritius in July 2011.

Projects
The first of these projects is the PREDICT project for which the institution received funding under the JISC Institutional Approaches to Curriculum Design strand.1 PREDICT (Promoting Realistic Engaging Discussions In Curriculum Teams) aims to develop a new curriculum design process that is efficient, flexible and focuses on enhancing educational development

and the student experience and, is supported with responsive technology to accommodate our curriculum models. It is one of twelve projects funded under this particular JISC strand and runs for four years from October 2008. The project is focused on the actual engagement of staff in the design and delivery process of programmes.

The other project relates to a new institution-wide approach to the implementation of educational technologies, the Strategic Learning Environment (SLE), which was developed in response to changing the institution’s virtual learning environment but with a new pedagogic focus. The new OpenSource VLE (Moodle) was implemented from September 2009 and the old VLE will be phased out by September 2011. However, the focus of the initiative is not just on the VLE but a core set of strategic technologies that enhance learning including e-portfolio and assessment systems, video and audio conferencing and exploring new social media tools The SLE is being developed through a roadmap which focuses on five pedagogic themes: assessment and feedback; collaboration and communication; learning and research assets; learning environment and curriculum design; and it enables a range of educational methods to be available to support the learning experiences of students and staff. These methods could include enabling students to find course work online, quizzes to monitor progress, or a forum where students can chat to other students and lecturers about aspects of their programme. All these methods enhance the learning experience of students by complementing the face-to-face interactions they have with staff. A key principle underlying the SLE is that the initiative is focusing on “redesign for delivery”. This draws on approaches for integrating educational technology into a broader educational design context such as those advocated by Beetham and Sharpe (2008:27) who observe that often in the application of VLEs “... design approaches ... are either based on the content of materials or on non-pedagogical aspects of course administration” (2008, ). With the SLE initiative we were keen not to make these mistakes and instead embed a pedagogic approach into the redesign of modules in the new SLE.

Core to both the projects is that in order to achieve any beneficial change staff engagement and dialogue is vital (Bregman 2007). Engaging with staff through a variety of means and devolving responsibility for implementing change, as advocated by Bregman, have been important underlying principles for both projects.

Both the implementation of the SLE and the PREDICT project are led by senior staff from the Learning Development Centre (LDC). The LDC is seen as the hub within the University for the development, enhancement and research of learning and teaching activities across the University and the associated support for staff for these activities. It therefore appropriate that the two projects are led from this Centre ensuring there is close alignment to the University vision and goals for learning and teaching and staff leading these can champion the proposed changes (Gray & Radloff 2006).

Terminology
As noted in the introduction the term “curriculum” is unfamiliar to many academics in Higher Education often because the term is not used but instead terms such as “programme” and “module” or “course” are used with the words “design” and “approval”. The staff of the LDC used this term but this was also not consistent and so it was not surprising staff appeared unfamiliar with the term across the institution. When undertaking workshops or meetings with staff that focused on curriculum design staff would often refer to the words “the content of the programme”, “the syllabus”, “what the students learn” or “what I teach on the module”. This was similar to the workshop at the conference where peers identified terms their colleagues used as including the above and “lessons”, “programme subjects” and “what the student studies”. It was also noticed that staff were often focused on the content of their module or programmes, as supported by Beetham and Sharpe (2008) rather than the actual design or delivery elements of that content. This is not necessarily surprising in that the academics concerned are subject experts but it also explained, to some degree, why staff
found it difficult to think about structure and delivery elements of curriculum design as they were not necessarily experts in this area.

There have been many definitions provided over the years with some of the most well known being those of Stenhouse (1987:4) who defined a “curriculum” as “…an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice’, and Kelly (2009:13) who defined the curriculum as “the totality of the experiences the pupil has as a result of the provision model’. These definitions provide some good principles however throughout the projects we have been looking to develop one that staff can be familiar with and so have drafted the following definition that will be examined further over the next year. “Curriculum relates to all aspects of the student experience during their programme both within the institution and beyond which enable them to engage in their learning and achieve their potential”. This all encompassing definition is designed to be more accessible to staff and enable them to appreciate that the curriculum is more than just the content they are delivering, but relates to the full educational experience of students, and potentially staff, engaged in a process of co-creation of learning.

Barriers to Curriculum Design
As staff from the LDC work across the University to support learning and teaching development there are often discussions about possible innovations that could take place with curriculum design. However, through these discussions, and those undertaken during the project activity, the authors became aware of the many barriers that stopped staff becoming engaged in curriculum design beyond the issues of terminology. Over the last decade in particular these barriers have increased due to the financial climate resulting in cuts in funding, staff reductions and often a change in direction (Meister-Scheytt & Scheytt 2005 and Shattock 2005). These have all led to staff adopting, as one workshop participant put it, a “don’t fix what ain’t broke” mentality. As staff workloads increase they have to prioritise what can be done and if a programme is working well it does beg the question why make changes? Other barriers cited both within the authors’ institution and by participants within the workshop included staff not knowing who can help them and provide support, staff having insufficient knowledge, a lack of resources, not being aware of the bigger picture, the focus on quality assurance systems and the paperwork which is often perceived as unnecessary bureaucracy, a lack of institutional recognition and award and the increasing focus on research. This has led to curriculum design often being regarded as an administrative burden as opposed to an integral part of teaching and learning.

Strategies to support curriculum design
The LDC staff had a range of strategies that had been used prior to the two projects but the focus that these projects provided was an opportunity to review and develop these strategies as well as implement new ones. The following discussion outlines a range of strategies used that have been found to be successful over the last two – three years although this did not happen instantly. This is supported by Fullan (1989) who suggests this is an appropriate time span dependent upon the size of the change and the complexity. One of the key lessons from both projects has been that such change does not happen instantaneously and in a measured way and is not linear (Scott, 2003). In fact, change has been messy, unplanned and often unexpected but nevertheless it has been more embedded because of that.

Staff Development
Staff development or building change capacity is a crucial aspect of any wide scale institutional change programme (Fullan, 2006). The LDC provides a Master’s level programme in academic practice although most staff choose to exit from this programme in year one having completed the postgraduate certificate. One of the author’s who teaches on
and oversees the programme identified that there was a module on curriculum development and evaluation but it was in the second year of the programme and was therefore not undertaken by the vast majority of students despite it being key to their role. This meant that there were only 6 – 10 staff undertaking this annually. This lack of engagement with that module is an indication of that disengagement from the curriculum design process that we identified above.

The module was revised as the PREDICT Project started and moved to year one to demonstrate that it was of crucial importance to educational development of academics. The revision of the module meant that it now explored the whole curriculum development cycle including evaluation and took a more holistic approach than just the approval meetings and paperwork. This was in response to the perception that curriculum development is just an administrative process. The module also includes opportunities to be part of a curriculum development team and explore the student experience across the programme taking account of some of the key values and principles the institution has for curriculum design. This change was also in response to those perceptions of curriculum design that did not relate it to the student learning experience or the wider context of the institution. These changes have been successful in terms of increased engagement in the module with nearly seventy staff undertaking the module in the last three years and there are already nine staff booked on for next year.

In addition, one year later a colleague within the LDC team also designed and commenced running a technology enabled academic practice module that included within it curriculum design as a key component but specifically focused on blended learning. Last year the module had thirteen students and this year there are nineteen. The approach here has been that when implementing educational technologies these should be embedded within the curriculum design process, again a core principle of the SLE initiative. If educational technologies are implemented without engagement with curriculum design processes then the technology merely becomes an add-on and is perceived negatively by the students. A recent report for the National Union of Students highlights how students perceive that the use of technology in most UK universities is rather disjointed and unaligned with programme and module outcomes (NUS, 2010).

These changes to accredited professional development opportunities have led to many more staff using the term “curriculum” in a broader sense, discussing it and explaining it to their colleagues which, has led to greater engagement and thought in the development of programmes and modules. Furthermore, staff within departments whose role is to provide services to support education such as Information Services are also now using this term and reflecting on the impact their services have to curriculum design activities. This latter development was unexpected but has been extremely beneficial in terms of service areas understanding how they support the educational activity of the University.

With the SLE we also introduced a programme of staff development activities, but in keeping with Bregman’s notion of devolving responsibility to engender engagement, these sessions were led within the Schools (2007). Although some sessions were designed to show staff features of the new technologies that were being deployed, what was advocated was a broader pedagogic approach that focused on this notion of “redesign for delivery”. The word “migration” in terms of moving content from one system to another was banned and staff were encouraged to make the most of the new tools of the SLE by rethinking their programmes and modules. Academic staff from the LDC, were on hand to work with School educational technologists to ensure these principles were incorporated into staff development sessions. Some Schools also went as far as to doing module inventories where they audited every module to ascertain which tools were being used and how. We are continuing this approach as we are now looking at a major upgrade to the SLE and
modelling this within the LDC team in our redesign of the MA in Academic Practice and its use of educational technologies.

**Mentoring**
In response to the recognised barriers around engagement with curriculum design, the LDC team also changed the way it worked with academics. Again, Bregman (2007) advocates a continuous coaching and mentoring approach to support the continued adoption of any change. Previously this was very much focused on staff coming to the Centre for advice, working through those staff who already had connections with us and through staff attending our workshops. The new approach was to have school liaison teams which consisted of both an academic and a learning development consultant from the LDC team who would attend key meetings in schools related to learning, teaching and programme management and who would link to staff. The academic staff from the LDC could provide pedagogic advice and academic credibility whilst the Learning Development Consultants provided advice on the appropriate introduction of technologies from a pedagogic perspective. In addition whenever a member of staff first identified they were going to explore developing a new module or programme we provided a named mentor from the team usually from the academic side to support them in curriculum development right from the outset. This enabled the academic developer to become part of the community of learning and therefore share knowledge and expertise as well as encourage new ideas and, focus on what the academic saw as important and problematic (Barrett et al 2004, Brown & Duguid 2000 & Fraser 2006). It also enabled them to help staff in Schools understand how the documents they had to produce to adhere to University quality processes could actually aid the curriculum development process from a more holistic pedagogic perspective and move it from merely an administrative burden. This model of collaboration results in a richer, more rewarding design process than the previous model of providing initial workshops and then assuming academics could undertake the development (Ziegenfuss & Lawler 2008).

Although this new mentoring approach has only been running for one year, we are starting to see a small increase in conversations about curriculum design and requests for advice and support. Over the next year we plan to embed this approach more fully through following up with staff who we meet in the initial stages of curriculum development and work with the quality assurance team to look at closing the loop between quality processes and design on an ongoing basis, for example, through mentoring staff engaged in annual programme evaluations in discussions around curriculum development.

We used a similar pattern of support with the SLE implementation when for the first year we wanted to focus on those who wished to pilot this environment for their modules/programmes. We linked them with a Learning Development Consultant in the same way and again similar conversations took place. This could be seen as one of the workshop participants said as ”working with the enthusiasts first” which is often more effective when it comes to bringing others on board. In our experience, successful change often relies on voluntary adoption and snowballing rather than a top-down approach.

The SLE is now being rolled out across all programmes but due to the enthusiasm of those early adopters others are meeting this change with interest and optimism about what they might be able achieve as well as relief that this is an achievable process. It has been a truly collaborative initiative with the LDC, Schools and Information Services working together in partnership to enact the changes required. Senior management have praised the initiative as being one of the singularly most successful institution-wide projects. Although a significant focus may have been on the technology, we have been able to keep a consistent focus on curriculum design, because of those activities initiated under PREDICT and use this to build a firmer foundation for the introduction of new educational technologies in the future. Taking a more mentoring and partnership approach has enabled Schools to own the
change rather than feel that it has been foisted upon them and this has been instrumental to the success of the initiative.

**Learning Development Associates (LDA)**

Last year we identified that it would be useful to have some additional resources within each School to assist with some of the developments that were occurring and to support the University’s Learning and Teaching Strategy. We developed a role description for a Learning Development Associate who was to be employed by the LDC but placed within each School for one day a week. These posts were advertised and we were able to appoint one LDA per school as well as one additional post from the PREDICT project fund. Those who undertook the posts ranged from a PhD student to visiting lecturers with a lot of experience to a few senior lecturers. We wanted to ensure that each School got the appropriate person for their work rather than limit the scheme to particular categories of staff, hence the range of staff involved. Whilst the remit was to work with the Associate Deans for Education within the Schools on the specific priorities that the School had, most of the activities related to curriculum design. This was a development that we had not originally anticipated but provided us with some rich data and evidence. It also enabled us to understand that curriculum design was broader than we had initially thought. Projects that were undertaken ranged from examining curricular to see what key skills existed within programmes and could be developed further, to exploring how to increase the use of blended learning within a programme, to developing a module that was an elective on reflective practice and is now about to become a compulsory module for all students following an excellent evaluation. These LDA roles appeared to work well because the staff were already known within the Schools and knew the culture and context. This is compatible with comments made by the workshop participants who noted that one of the strategies they often used was that of “establishing staff trust and having a common purpose”. They were regarded as colleagues rather than “outsiders”. This is what we hope to achieve with the School liaison and mentoring approach mentioned above, but we still have more work to do in embedding the LDC team in the Schools and engendering that level of trust.

The LDA posts have been very useful for providing additional support when there are a range of priorities, however one of the points that these post holders felt needed to be developed was that whilst the flexibility to do something very school specific had been useful it would have helped them more as a group to have a common purpose for them. They wanted a focus on the same sort of initiative so they could share strategies and expertise and work more collaboratively. Again this fits with the comments from the workshop where one of the strategies cited was that of “choosing one theme per year such as assessments”. We have taken this into account for our next launch of these posts where rather than having one post per School we will have one post on each of the SLE thematic areas. This will enable a focus for the post but also a common purpose for each LDA as they will be engaged in exploring a particular theme across a range of Schools, from an LDC perspective we will also do more to support the staff in the early stages and embed them within the team so that they have more support and do not feel isolated.

**Learning Development Projects (LDP)**

Previously staff had said they would like to get involved in some more innovative development but had limited time or resources to undertake this work as well as their normal role. Through the University reward and recognition scheme some funds were identified that staff could bid against for such seed funding or pump priming projects. Again we wanted to make sure these fitted with School priorities and that each School had a project and so the bids were judged within Schools with our support. We felt strongly that these projects should have a demonstrable impact and therefore the project holders would need the support of their Schools. Whilst there was no requirement for these projects to be focused on curriculum design nearly all those who applied wanted to undertake some aspect of curriculum design or run pilots for activities to implement in their modules. These projects
have been supported by the LDC by providing a mentor who was identified in relation to the focus of the project; so where educational technologies were a key component, learning development consultants were the mentors and where curriculum redesign was identified, academics were mentors. This approach has again enabled staff to be encouraged and supported to in their curriculum design innovations.

Learning and Teaching Recognition Prizes
In the workshop, we discussed the importance of “reward and recognition of innovators” and this is something we have focused upon over the last few years. There had been a range of prizes in existence across the University since 2001 but the whole prize and award scheme was revised in 2008 to suit the needs of the Schools further and to increase recognition of good practice beyond a few individuals. One of the key criteria around the redesign was to improve impact and dissemination. Funds were set aside for each school to recognise good practice which over the last two years has particularly focused on curriculum design. In addition, this year there was an additional prize fund allocated to those who had undertaken good design when integrating the use of technology via Moodle into their module or programme and thus enhancing their student experience and striving to provide excellent teaching (Palmer & Collins 2006 & Skelton 2004). Although there was some initial concern about separating out recognition for staff engaged in activities using educational technology as the approach behind the SLE and supported by the LDC is to embed educational technologies within general academic practice, it was felt that this year special focus was required to recognise those staff who had excelled in their use of Moodle. Interesting, many of the staff who won awards in this category also won awards in other broader categories both from their Schools and the wider University, demonstrating that this embedded approach is exhibited by those exceptional and innovative academics. These prizes and awards have led to staff feeling that their efforts are valued and recognized.

Disseminating Good Practice
Whilst the above awards recognise individuals there have been criticisms of these schemes due to a lack of systematic dissemination of good practice, inconsistent information on the impact of staff receiving awards and grants, staff believing their development is only relevant to their discipline and no clear framework for award winners to mentor new awardees (Halse, Deane, Hobson & Jones 2007, Palmer & Collins 2006, Skelton 2004). The authors believe that a central part of the LDC’s role is about facilitating this dissemination of good practice by providing the networks for staff to see how their work could be used in another area and how they could support peers to do this. Several initiatives have been implemented to support dissemination in response to those criticisms outlined above. An annual conference for learning and teaching which enabled staff to present their work to each other was launched three years ago with the primary purpose of providing an academic arena for staff to share their work with their peers. This conference has been very successful with over one hundred attendees each year and positive feedback, such as “...this is the best event held here I learnt so much”. To facilitate a diversity of ways of disseminating projects, the LDC team have also built on an existing annual showcase event which was primarily so staff could share learning and teaching projects as they developed in a hands-on fashion. This now highlights successful initiatives and work in progress and gives staff the opportunity to discuss the challenges and successes of their pedagogic projects. We have found that such discussion is invaluable for inspiring other staff to enact change. Over one hundred staff attend the Showcase annually and one attendee commented that it was “fantastic to see what other Schools are doing and for staff in the Schools to see what we are doing”. Both the conference and showcase are high profile in that senior staff, including the Vice Chancellor attend, and we use them to build networks both informally and formally; for example at the Showcase we recognise new Learning Development Fellows each year to those staff who have successful undertaken projects with the LDC.
As with all events of this kind there are always those who cannot attend for whatever reason and despite information being circulated after the events in various internal newsletters people wanted to learn more and we wanted to ensure more systematic and permanent dissemination. Therefore we introduced the Learning @City journal this year for staff to publish their work and conference presentations, as well as providing a recognised academic forum for further dissemination of their work. For more informal dissemination, the LDC team have launched an educational development blog with “vignettes” that showcase good practice. Each vignette provides a short overview of a particular method or technique or it might consist of feedback from an event that staff have attended. The blog has five themes and one of these is around curriculum design where we are collecting case studies within this theme as well as tips and guidance. In the future we hope that the Educational Vignettes blog – http://educationalvignettes.wordpress.com/ - will also promote debate by providing a fora to discuss more controversial or challenging ideas about educational development and educational futures.

Conclusion
The strategies outlined here have been varied; some have been strategic in nature, such as the revision of the awards and recognition scheme; others have been tactical to recognise the changing culture within the institution. What has been a key lesson to all in terms of the strategies or methods employed is that most of them take time to develop and engage staff in a meaningful way. What we have learnt from both PREDICT and the SLE initiative is that to engage staff in the deep change associated with curriculum change is that a variety of approaches need to be deployed and the “return” on such activities is not immediate. Staff need to feel that they can trust those advocating the change and work to incorporate changes at their own time and pace. It is only two to three years on that we are seeing some of the changes incorporated into mainstream academic practice and whilst that pace of change may be frustrating, the benefit is that the change has been truly adopted and lasting. It is our experience that any change initiated in a shorter period of time tends to be more mechanistic and not properly embraced by academic staff. This fits with much of Bregman’s (2007) view of change within complex organisations. What the authors have noticed is that there is a definite cultural shift within the institution with many more staff discussing curriculum design in a more holistic manner not just in terms of approval and documents. The phrase “curriculum design” or “development” has started to be embedded within the fabric and vocabulary of the institution. Whilst this can be seen as successful there is still a need to continue strengthening these strategies and engaging with staff to ensure we, as an educational support service, meet their needs when designing curriculum as well as being responsive to the ever changing climate and culture of the institution and beyond.

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