# An Engaging Leadership Framework (ELF) Project investigating how Gen Y students learn

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This paper describes a research project to improve teaching methods to cater for Gen Y and Millennium student learning. The project was initiated by participation in using the Engaging Leadership Framework project and is designed to undertake research to inform teaching. Planned to take 18 months, it aims to spawn parallel projects on improving teaching for current younger generation university students. The objective is to improve student engagement in their own learning whilst also improving the research group members' individual teaching approaches. Two academics from different disciplines identified a common concern that their teaching styles may not be meeting the needs of the current young cohort of students. The project design uses an action research methodology with several iterations of data collection, action and review. In the initial cycle existing data from student surveys was analysed to ascertain the current level of engagement and what students perceived as needed to improve their learning. In addition, a preliminary investigation of the literature on Gen Y learning indicated that technology and flexibility were significant factors in their learning style. The preliminary results suggest that students want increased interactivity, yet beyond this they have not reflected sufficiently on what may assist them. The impact of this research is that whilst the academics focus on their own professional practice, this in turn provides an opportunity to impact on student learning.

**Keywords**: Engaging Leadership Framework (ELF), curriculum development, student learning, Gen Y, Millennium students.

## Introduction

Edith Cowan University (ECU) recognises the importance of being progressive in the area of teaching and learning. ECU is developing a set of principles to guide the design and delivery of an inclusive curriculum: curriculum that responds to the diversity of the student population, increasing student participation and enhancing academic outcomes. Therefore, this project aligns with ECU's strategic priorities in both research and learning and teaching.

- Strategic Priority 2: providing programs to meet the needs of our communities in a supportive and stimulating learning environment and
- Strategic Priority 3: developing research focus, depth and impact (ECU, 2010).

This project was initiated in early 2010 with an invitation from the Centre for Learning and Development (CLD) to take part in a leadership capacity building project. This project, the Engaging Leadership Framework (ELF) Project, is part of ECU's commitment to leadership development, especially in team leadership and to make improvements to tangible issue(s) in their sphere of influence. Dr Lorraine Bennett, Associate Director, Centre for the Advancement of Learning & Teaching, Monash University presented the initial workshop including clarification of the purpose of the project, an overview of the Engaging Leadership Framework (ELF), discussion of evidence-based issues, milestones and outcomes of the project, timelines, project activities and responsibilities of participants. The project is an extension of a previous Australian Learning and Teaching Council (ALTC) grant and is being rolled out at four universities. The development work involved the application of a systematic and strategic framework for leading change and improvement in an area(s) that the participants identified as significant for ECU. For example, the issues drawn from student performance or survey data, from staff workplace climate surveys, and from employer feedback or other university data.

"The purpose of the Leading Excellence Framework, a product of the ALTC funded project undertaken by Monash University 2006-2008, was to develop a tangible leadership tool, identify and bring key elements to underpin effective leadership of change and improvement. The ELF is a strategic and practical tool that brings together three critical elements for effective leadership of learning and teaching: scholarship, engagement and management" (Bennett, 2010). Figure 1 shows the ELF cycle of evaluation, planning, review and action.

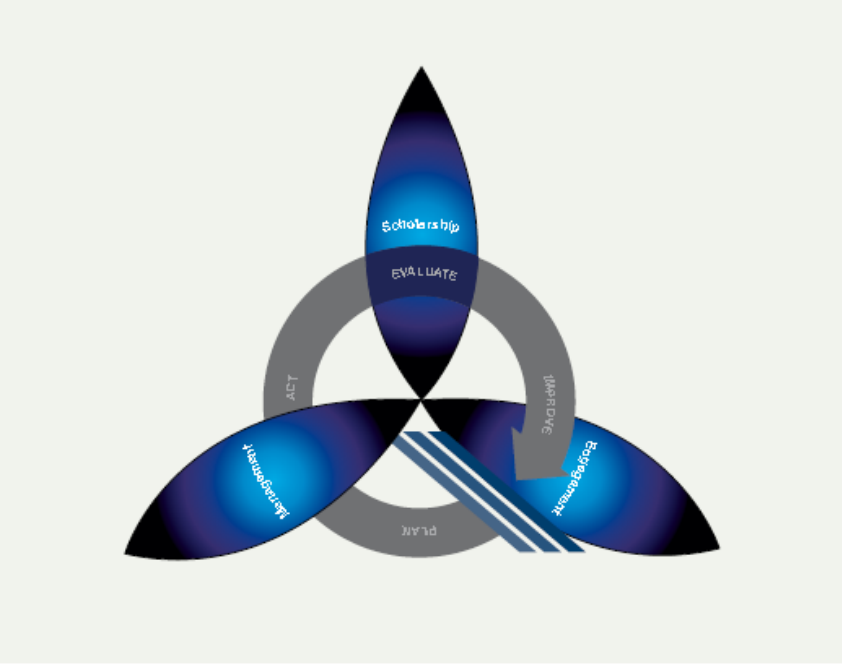


**Figure 1: Engaging leadership framework (ALTC, 2008)**

The ELF conceptual framework was the driver for this project in building leadership in learning and teaching. The ELF required that the selection of a real problem using a team approach. Such an approach provides an authentic context in which to develop and use leadership skills. The academics involved in the team are from Business at Bunbury campus, Computer Security at Joondalup campus and CLD at Joondalup.

The research problem chosen by the group was the disparity between how students want to learn and how lecturers want to teach. The research project therefore has two aspects

1. Developing leadership in teaching and learning (using the ELF conceptual framework), and
2. Improve teaching methods to cater for Generation Y and Millennium students' learning (using an action research methodology).

**Generation Y definition**

Generation Y and Millennium (Gen Y) students are those born between 1982 and 2003. In the late 1990's this group were also referred to as the Net Generation (Tapscott, 1998). These are the generation who has grown up with digital media. They are characterized by being comfortable with technology and are driving social change today.

This paper details the methodology and design of the research project into Gen Y learning (point 2). It provides preliminary results and discusses how Gen Y cohort learning can be influenced. It then discusses how the ELF conceptual process assisted in developing leadership into teaching and learning.

## Methodology

The project investigates into how current teaching methods may be improved with respect to how current students, particularly Gen Y and Millennium students learn. The project, to be undertaken over 18 months, is designed as research to inform teaching and subsequently impact leadership capacity in learning and teaching using the ELF framework. Thus, whilst the overarching conceptual framework is the ELF, the research utilises action research as its methodology as shown in Figure 2.

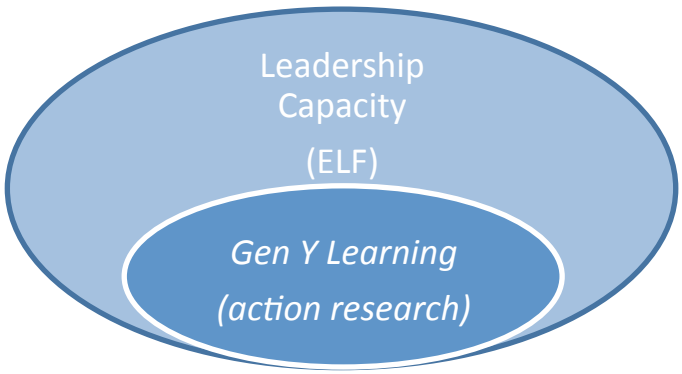


**Figure 2: Relationship between two research aspects**

Since the research issue is about improvement and integration of student learning methods into teaching practice, this necessitates assessment of the problem; defining the issues that exist around Gen Y student learning, developing practical and relevant solutions; and defining appropriate implementation procedures. The choice of methodology is influenced by the researcher's perception of themselves in relation to the environment and by the view of epistemology i.e. the theory of knowledge. Indeed, Whitehead and McNiff (2006) suggest that there is a distinct relationship between an individual researchers' view of the world and their interaction with it. Methodology selection requires a correlation of how the method objectives meet the purpose of the research and necessitates consideration of the expected outcomes of the research. This research aims to obtain an inclusive assessment of the context and real-world environment in which the participants are active rather than passive. In action research, the interpretivist philosophy of the method accepts that the researcher is aware of their presence and their research will affect the situation under investigation. This factor is intrinsic to the methodology as the researcher is aiming to produce both theoretical and practical outcomes (Galliers, 1990).

"Action research can be described as a family of research methodologies which pursue action (or change) and research (or understanding) at the same time" (Dick, 1999, p.1). It is characterised by the cyclic revision of action followed by reflection often culminating in the refinement of the understanding using methods such as modelling. The iterative nature of the methodology promotes convergence to a greater understanding (Dick, 1999). Figure 3 characterises this cyclic process and shows how action research sets out to analyse a state of affairs in a given context. Once analysed, action (change) can be consciously added to the situation to improve it, and its resultant effect observed. Reflection on the change and resultant effects are then made to produce possible further action. The assessment, action and reflection are key elements of the research methodology.

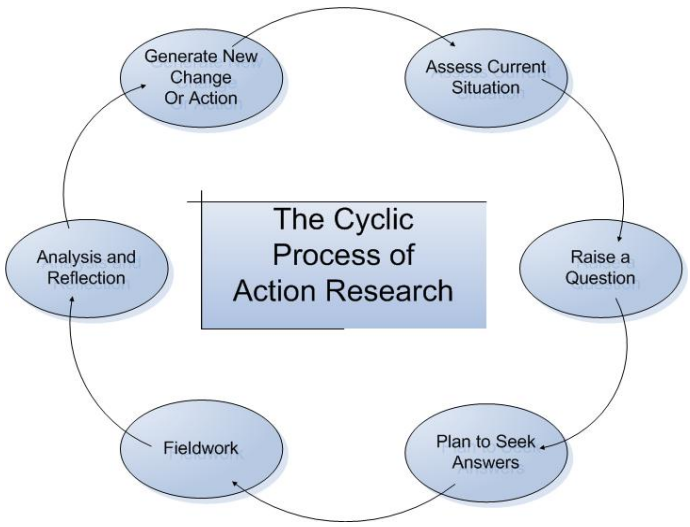


**Figure 3. The cyclic process of action research (Wadsworth, 1998)**

### Contextual validation

In order to prove the appropriateness of the method selection researchers must consider contextual validation. The influencing factors in this choice, most appropriate to the student cohort, includes the target environment, the need to model

solutions in a real-world context and therefore the necessity to intervene, and the need to engage participation from the target population.

### Rigour and Limitations

Whilst some researchers suggest that to establish rigour of action research, credibility, transferability and dependability of the research should be established (Dick, 1993; Lincoln and Guba, 1985; Thorne, 1997), others suggest that validity is established in the process itself, through the iterative research cycles which enable reflection and confirmation on the previous experience by those involved. Despite the evolutionary nature of the research, rigour can be maintained if the action research process is clearly defined and each stage documented. In addition, declaration of the research philosophy and objectives, together with the *a priori* knowledge of the researcher, can limit impartiality concerns. The deductive-inductive interpretation of results means that care must be taken during the research to validate subjectivity and interpret results using complementary techniques such as triangulation and peer review (Barbour, 2001). Klein and Myers (1999) describe a set of seven principles which interpretive field research should follow in order to ensure validity and rigour of the methodology employed, and in the subsequent result reporting.

### Limitations

From a traditional research perspective, the problem in using action research is that it cannot be fully planned or channelled toward a particular path. Whilst the researcher can delineate aims and objectives, the detailed execution of these cannot be designed with certainty as responsiveness to the situation is important and outcomes may not be predictable. The choice of action research as the overarching research paradigm dictates that any research design will spiral from general investigation cycles to more specific cycles. Thus, a gradual refinement of the research objectives will be apparent. As this form of research aims to develop both an increased understanding of the context, and to promote appropriate change, an exact map for each cycle is not possible at the start of such research. Its very nature ensures that a subjective viewpoint will be derived, and emergent theory from the interpretation of human behaviour within the context under investigation is the result (Williams, 2003).

### Design

The design of the Gen Y learning follows the action research methodology and thus has several iterations that are not able to be fully pre-defined.

*Cycle 1: Student experience of learning:*

The student experience and the improvement of teaching in order to improve student learning is a main focus of this project. These required two sources of initial information were required. Firstly, a review of existing student experience data. This information highlights the initial issue and was gathered from the Edith Cowan University standard Unit and Teaching Evaluation Instrument (UTEI) feedback forms containing student perceptions of their own learning. The second source was the literature on Gen Y learning to identify what factors have already been identified to promote Gen Y learning.

Source 1: This stage was important to gain a baseline for the individual lecturers participating in the project. Once the group lecturers verified their own beliefs about students' perceptions or were alerted to evidence that their views were incorrect, they

collaborated to achieve improvement strategies. Existing data from student surveys were analysed to ascertain their perceptions of their own learning and what students perceived as needed to improve their learning. This was required to provide a baseline for each teaching academic in the group to measure change during the project. It is acknowledged that each lecturer has different teaching styles and different ideas on what motivates and assists their students to learn. Hence, to be able to assess potential improvement it is necessary to know what level of engagement is already fostered by each lecturer individually in the project.

It is acknowledged that a schema will need to be devised that defines a 'level of engagement' scale. However, an initial sense of the current status is needed. The reflection on student learning from the students' perspectives in this first action research cycle are taken from the UTEI data. This data from the unit and lecturer questionnaires that includes three questions that relate to student reflection on their learning:

1. The unit extended my learning (from unit evaluation questionnaire)
2. What aspect of this lecturer's approach to teaching best help your learning? (from lecturer evaluation questionnaire)
3. Would you have liked this lecturer to have done anything differently? (from lecturer evaluation questionnaire).

The results and comments of these questions were analysed to gain an insight into what improvements the students' themselves perceive are required in relation to their learning. As a preliminary step it is important to understand the starting point for individual lecturers teaching competency in relation to their students learning.

More evaluation data will be collected to verify this conclusion when the lecturers facilitate discussion in semester two 2010, guiding students in reflective practice that they have previously learnt in Business Edge and Computer Security units. Together the lecturers and their students will reflect on how they study and learn most effectively. Again about week 6, a similar discussion facilitated after the mid-semester exam will investigate which study methods were most effective. After the end of semester, evidence will be gathered identifying how revised learning and teaching methods improved or could students' results.

Source 2: Literature review of Gen Y and Millennium student learning.

*Cycle 2: Collaboration on development of teaching strategies.*

This incorporates how the three academics in the project group, from multiple disciplines, work together in a team to improve student learning. Teaching strategies that promote more engaged learning in the Gen Y and Millennium student cohort will be developed and implemented.

*Cycle 3: Implement and re-evaluate student experience.*

Measure change using post-test evidence gathered from an end of project survey and subsequent UTEI feedback.

*Cycle 4: Project team reflection.*

The final stage will focus on the Engaging Leadership Framework (ELF), its usefulness in assisting three academics and reflections on the process.

## Results

The preliminary results for cycle 1 are given in dualistic terms of the student learning aspect of the project and the application of the ELF, with the cross disciplinary opportunities this provides.

### Student learning

This is phase one of ELF (defined by the Quality Cycle: Evaluate, what does the data say? as in Figure 1), and the initial cycle of the action research process. In this initial phase of the project there are two aspects of the evaluation. Firstly, data on student experience of learning from the students themselves needed to be considered. Secondly, a review of the literature to obtain multiple perspectives of Gen Y learning was undertaken.

*Student experience of learning*

Institutional data from the UTEI scores and comments and anecdotal evidence from students' work suggested that there is disconnection between how they are taught and the ways in which they want to learn. Historical data from 2008 to 2010 UTEI was analyzed to gain an understanding for each individual lecturer of how well students already engage in the face-to-face teaching scenario. For this paper, the case study is based on the CSI2104 Information Warfare unit in the School of Computer and Security Science in which about 90% of students are Gen Y.

Using the three questions from the UTEI in the Information Warfare unit across five consecutive semesters (2008-2010) gave the following:

1. The reflection by students' on the impact that the unit had on their learning ("This unit extended my learning") shows that 100% agree or strongly agree each semester except one when 91% agreed or strongly agreed.
2. The comments on the lecturer survey regarding "what aspect to this lecturers' approach to teaching best help your learning?" revealed a significant amount of positive comments including

> "Makes learning fun. Always engages the class"
>
> "They were funny and it made the class very interesting, easier to remember and learn stuff. She would start the class off asking a question, give us an interesting fact or something really weird to think about that relates to the module, kept us thinking/engaged. There were a lot of discussions/activities on various scenarios relating to the modules which were helpful in getting us thinking about ethics, application in the real world.etc."
>
> "Made it very interesting and communicated very well. Shared their passion of the subject which encouraged students to think more actively."
>
> "Trish's enthusiasm for the subject and in depth knowledge of all the topics presented helped to make sense of a somewhat complex unit"
>
> "Her ability to interact with the students coupled with a talent for truly making us 'think' outside of the box was commendable. Well done Trish!"

These comments reflect that students value the active learning techniques that are already incorporated into the lecturer's current teaching style.

3. The comments on the lecturer survey regarding "Would you have liked this lecturer to have done anything differently?" nearly all comments said there was nothing to be done differently or the comments were related to the content not the lecturing such as "Maybe have a workshop for students who have no IT background and find course harder than others".

In addition, data collected as part of the ongoing evaluation of learning in an individual unit, collected in week 4 of the current semester from the face-to-face student cohort also indicates that 50% want more interactivity in tutorials as one aspect of their learning. Whilst not conclusive evidence, interestingly, the lecture and tutorials are taken by two different academics.

*Literature Review*
A preliminary review of the literature relating to Gen Y learning reveals that they are exposed to more real-time information than any other generation. This has the effect of altering the expectation of the types of materials they are exposed to as part of their learning. Indeed, they have been accused of being over reliant on information technology and communications technology to the detriment of their interpersonal skills.

Further, it has been suggested that this leads to a "shortened collective attention span" (Elam et al, 2007). According to Nicoletti and Merriman (2007) Millennial students prefer to learn collaboratively using goal oriented links relevant to their future aspirations. In addition, they like flexible environments that make learning fun and use humour and make use of technology. This means that many are very visual learners and require a considerable amount of visual stimulation to become engaged.

From a learning perspective this generation typifies a new learning model that is based on discovery and participation. This demands that education needs to be approached from new and innovative angles. Indeed, university graduate attributes all acknowledge that computer literacy is a core skill required in the 21$^{st}$ century workplace and is essential to be a lifelong learner. In our knowledge and digitally based century our main currency is now human capital. This raises the question of 'how can this generation and subsequent digitally aware generations, acquire the communication, critical thinking and collaboration skills, together with appropriate ethics and values necessary to be effective member of society?'.

## Discussion

The discussion focuses on the two distinct aspects of the research project – the improvements in learning methods for Gen Y students and the application of the ELF framework to guide such research and foster collaboration.

### Student experience and Gen Y learning

Some of the young student cohort in these classes appears to value active learning methods used by this lecturer. Research focussing on their own professional practice provides an opportunity to have direct impact on student learning. Feedback from their own students about their teaching and how the students learn is expected to

provide insights into ways that the teaching could be improved to enhance learning. Facilitating students' and lecturers' reflective practice of their own methods of studying and learning will be a method for gathering data, a method for facilitating learning and therefore also a method for improving learning. Simply, the disconnection between teaching methods and how students want to learn and their learning methods, with a focus on those students of the younger generation currently in classes who seem to bring new values and expectations. A key benefit anticipated is firm evidence of students' perceptions about the impact of various teaching and learning methods on their own learning.

The data for this particular unit provides a baseline for the lecturer but does not provide a significant base in terms of students' learning. This then raises several questions. Since there are so few comments on what could be done to assist their learning (and an overwhelming positive response to the teaching style), this poses four questions:

1. Are the students self-aware or sufficiently experienced in reflection on their own learning to know what would assist them further?
2. Are the students sufficiently experienced in learning styles and teaching techniques to know what would assist them further?
3. Do students want to improve their learning in this class?; and
4. To what extent does the relationship of the lecturer with the students affect their learning and the quality of this learning?

In analysing the data from the CSI2104 case study it should be noted that the lecture component of the unit already contains significant engagement activities. Each week as part of the lecture plan, reflective activities to consolidate learning and to expand thinking are undertaken. This provides a baseline in CSI2104 that already has a level of interactivity and engagement with students. However, it is not of concern that there is already an existing level of engagement that may or may not be above the norm because the purpose of the research is to improve engagement and participation in students' own learning, relative to the baseline. It should also be acknowledged that there are differences in styles between lecturers and thus comparison between academics teaching different units may not be valid or indeed useful. The aim of the research is to develop strategies that more closely meet the needs of Gen Y student learning and could be employed by any academic. They are focussed on the student learning rather than the lecturers' delivery methods.

It is clear from the literature and student feedback that traditional broadcast learning, which requires the students to be on the same wavelength as the lecturer in order to engage in their learning, is not effective with this generation. Despite moving into the electronic environment to deliver materials, it is still a teacher-centred, broadcast approach. Despite individual efforts to transform teaching to student-centred learning, the majority of approaches using the lecture format are still teacher-centred. Making materials available online does not automatically mean the style of instruction changes or improves. The solution is not merely in the use of technology. Fluency in the use of the digital media is necessity for this and future generations.

## Application of the ELF

The three academics who chose to work together, found it helpful to work in a team and continued this partnership because of their common interest in improving student

learning, common undertaking to work together, trust, knowing each other, openness to admit vulnerabilities of teaching. Face-to-face meetings provided an opportunity for intellectual discussion, identifying importance and commonality of the issue by verifying lecturers' own beliefs about students' perceptions, overcoming potential feelings of isolation and alerting each to evidence. The discussion was motivating and action oriented.
Applying ELF was straightforward although it was not fully understood at the start of the project that you could enter the ELF process at any point, rather than having to create a project from scratch and collect new research data. ELF can be used effectively and sustainedly building on current data and applying it to existing issues. The ELF framework provided a good structure to follow, that was not dissimilar to action learning (Norton, 2009), which is a research technique that all group members are familiar with. It was helpful to work in a team as this provided supportive motivation to one another to actually address the issue with the non-teaching team-member playing a key role in motivation, organising and ensuring that we followed the ELF in a logical/cyclical way. This was important as one of the major obstacles in undertaking any project is time to devote to the task in amongst a busy semester for student focussed academics. The ELF workshops provided the initial contact with other like-minded ECU staff and provided the opportunity to work with staff with whom we may not usually have contact. In this group we were fortunate to have two staff from Joondalup and one from Bunbury in different faculties. This allowed cross school, faculty and campus collaboration. It was unfortunate that so few staff from other groups were able to attend the second workshop.

The ELF model is assisting the group to learn leadership qualities through research informed teaching and thus meet one of the project objectives to promote inclusion of other academics in similar educational goals. Further, it has encouraged the group members to initiate conversations with colleagues on how to improve their engagement with students and establish commonalities in our teaching challenges. It has also prompted more engagement with students and reflecting on their own learning. The project has led to a consolidation of the professional relationship and rapport with students who appreciate that we are not only interested in communicating the information but committed to their individual learning. It would have been helpful to have a follow-up workshop two weeks after the initial ELF workshop. Also, the timing of the first workshop was at the start of semester and for those academic staff who are also course coordinators, this meant that getting the project started at the start of semester was problematic. The original ELF project invitation did not indicate sufficiently that the session was not only informational but that participants were expected to become involved in a project. It therefore created some misunderstanding as to the purpose and intention of the session, which may be one reason so few people from that workshop engaged with the project and continued with it.

Scholarship, engagement and management, as critical elements of the ELF tool and the Quality Cycle of the ELF provide the method for this project, facilitating evidence-based decision making. The team's aim to improve teaching and learning shows a clear goal of academic excellence, the scholarship component of the ELF and encompasses the mission and values of the University. This project is inspired by building on the professional partnerships developed between the three academics to actively support each other in their pursuit of academic excellence. Being cross-discipline and across campuses, the importance of relationship building with trust,

respect and open communication is shown. ECU's values of integrity (pursuing rigorous intellectual positions), respect (valuing individual differences and diversity), rational inquiry (motivated by evidence and reasoning) and personal excellence (striving to realise potential) all lay the foundation of this project both together as a team of academics and in the ways we view and work with students. Both teaching academics had been concerned that students in their classes, particularly Gen Y students, needed to become more self-reliant as is ECU's Vision. Students did not seem actively engaged with their own learning or taking responsibility for our own learning as visibly as the lecturers expected. As academics pursuing teaching that is best for students; being concerned about the individual differences between Gen Y and older students; being motivated by finding evidence from our students and colleagues to substantiate ways to improve our teaching; and to strive for students to achieve their best in our units, this project brought professional support and potential to improve teaching and learning.

## Conclusion

With the project design in place, the project has some outstanding data in cycle 1 to collect, but has begun some initial discussions related to cycle 2work. The initial capture of the student experience is important because it is the students who are experiencing the learning and the role of the academic is to facilitate this. The next step in the CSI2104 case study is to collect data in the form of reflective questions from students of their engagement in the unit and its impact on their learning. Part of this may be to ask them to compare this unit with other units they are taking to generate deeper reflection on what assists them learn – rather than a unit comparative exercise. Anecdotally, many staff believe that unless students are really reflective when filling in the UTEI survey they will often base their comments on the relationship they have with the lecturer and how interesting the unit is, rather than their actual learning experience. This in no way invalidates the UTEI data but it does limit its use in terms of developing more meaningful ways to assist the students with their learning. The influence of the relationship with the lecturer is one avenue that warrants further investigation within the context of this research.

The project has therefore initiated several areas of change by:

- researching Generation Y and Millennium Students' learning through a literature review;
- prompting increased reflection by the research group on their own teaching techniques; and
- increasing the ability of group members to influence a wider group of educators through publication and dissemination of the research.

Further, the project also aims to seed parallel projects on improving teaching for current younger generation university students. The objective is to improve student engagement in their own learning, whilst also improving the group members' individual teaching approaches.

There are many practical ways that a curriculum could be designed to enhance student participation in thinking about their own learning, and for academics to reflect on their teaching practices. As such several other research aspects have been identified as interesting and potentially influential in Gen Y cohort learning. Further results and the improvement strategies will be reported in 2011. In consideration that this research is

multi-facetted together with reflection on this initial cycle of the research, additional aspects that require addressing include a definition of engagement levels and comparison of multiple lecturers to get a richer picture of the ;possibility from the student perspective.

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