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The XYZ of the Living Curriculum

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ABSTRACT
Using literature, the preferred learning environments of the generational groups X, Y and Z are examined. A first year, Bachelor of Construction course, Team Management is mapped against Unitec’s Living Curriculum, which is then mapped against the generations’ preferences. The course is then analysed using the Unitec’s student evaluation system, the “Rate my Course” website, lecturer observations and student assignment reflections. Investigation shows that in terms of a learning environment, characteristics of Generations X, Y and Z are not always distinctly different but the theme of increasing urgency for outcomes runs through most strongly. Team Management maps closely to the Living Curriculum requirements but this does inherently produce high student satisfaction. The Living Curriculum delivered through the course, does align with generations’ desires but contradictions are apparent. Recommendations for the future focus on balancing the potential contradictions.

KEYWORDS
Generation X, Y, Z, learning styles, living curriculum

INTRODUCTION
Two of Unitec’s drivers are to become recognised for innovation in teaching and learning and enhancing the student experience. A strategy to achieve this is to embrace a living curriculum and E-learning principles. It is important to consider how the range of generations at Unitec will respond and interact with these principles. The aim of this paper is to explore how the generations’ learning preferences align with the living curriculum by examining student experiences of a single degree course.

The living curriculum
The term Living Curriculum is not unique to Unitec and is used widely by many educationalists (Guyette 2004, Reilly 2007, Squires 2005). The “living” term emphasises the dynamic nature that grows and changes to the needs of communities. Its pedagogical roots lie in the social constructivist thinking of the Russian psychologist Lev Vygotsky. This influences pedagogy by the belief that people learn best by constructing their own
understanding and solutions to problems through discourse with peers and a broader community. Daniels (2005) and Pass (2004) provide commentary on the approach, extending to roles of teacher and assessment. Social constructivism is a stark contrast to traditional behaviourist educational philosophies involving expert directed learning through demonstration and instruction. Constructivism in itself is not innovative, established many years ago, but provides foundations from which Unitec’s Living Curriculum builds.

Unitec’s Strategic Plan comprises Key Drivers:

• Meeting the needs of Communities
• Enhancing the Student Experience
• Innovation in Teaching and Learning
• Being an Excellent Business

The most prominent outcomes required from Innovation in Teaching and Learning driver is the introduction of the Living Curriculum. The Curriculum Design Policy states:

“Unitec programmes will have a living curriculum that:

1. involves complex conversations
2. is curiosity/inquiry led, and stimulating
3. is practice-focussed – educating students ‘for work, in work, through work’
4. is socially constructed – self-sufficiency and collaboration are equally valued, and together they help nurture resourcefulness and resilience
5. blends face-to-face and web-based learning
6. is research-informed
7. has a discipline base, and is also interdisciplinary
8. develops literacy’s for life-long learning
9. includes embedded assessment.”

(Curriculum Design Policy 2009)

Criteria 1, 2 & 4 have the strongest connection to constructivist thinking. Comparing these criteria to existing courses and characteristics of relevant generations will inform and develop our pedagogy

The team management course

This is a compulsory, first year, first semester course delivered to 75 students on the Bachelor of Construction. The course outcomes, delivery method and assessment mechanisms are a result of incremental development and have not been specifically chosen with the living curriculum in mind.

Learning outcomes are:

1. Investigate problem solving models using group interactions.
2. Examine models of thinking skills.
3. Distinguish factors which impact on productivity, learning and performance
4. Examine professional relationships and group interactions.

These are achieved through a project completed in randomly formed groups of 5, 25 and 75. This requires the assembly of three small buildings to the timber framing stage to meet NZS 3604 and safety standards. Groups of 5 construct part of the timber frame. 5 groups then combine to assemble the parts into a completed structure. The class of 75 is challenged to complete all three assemblies within a 2hr time frame. The buildings are then used for training of plumbing students in cladding and flashing skills and then used as utility sheds.

Supporting lectures and workshops cover:
- Problem solving models, Creative thinking, Critical reading;
- Communication Theory: Verbal, Non-verbal, Oral and Graphical Communication, Interpreting Industry Documentation, Communication Technology, Communication from Different Cultural Perspectives, Structured Writing, Referencing;
- Group roles and Team Behaviour, Group Processes and development leadership, meetings, communication networks.

Assessment comprises:
- The submission of a group business report outlining a pre construction and safety plan. 20%
- A group verbal presentation reflecting on problem solving tools used and the interrogation of building documentation. 20%
- The group assembly of the building within set quality standards. 10%
- An individual reflective journal type report analyses the group behaviours and potential improvements. 50%

Individuals are awarded a fraction of the total group mark depending upon their performance within the group. This performance is measured against team-working criteria agreed by each group early on in the course. Communication outside of face to face workshops is through a web based shell with project based questions handled through an electronic Request for Information form (RFI).

LITERATURE REVIEW – EDUCATING THE GENERATIONS

Exact boundaries of the different generations appear blurred (Kelan & Lehnert, 2009) and the broad ranges are tabulated below. A number of writers refer to a generation lasting 20 years, but Tulgan (2000) argues that as a result of the speed of communication and change, the period over which groups have meaningful and distinct characteristics is
reducing. Extremities of the ranges are noted in Table 1 with some commonly occurring narrower ranges in brackets.

Table 1 – Summaries of generational boundaries

<table>
<thead>
<tr>
<th>Generation</th>
<th>Born</th>
<th>Age Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>1961-81</td>
<td>50-30</td>
</tr>
<tr>
<td></td>
<td>(64-78)</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>1982-2000</td>
<td>29-11</td>
</tr>
<tr>
<td></td>
<td>(78-87)</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>2000-2011</td>
<td>11 &amp;under</td>
</tr>
<tr>
<td></td>
<td>(94-2004)</td>
<td></td>
</tr>
</tbody>
</table>

Much of generational analysis focuses on how to sell or manage people in the workplace. Tulgan (2000), Sheahan (2005), Erickson (2008) are relevant examples of such work. Educational content focuses on workplace training or children at primary or secondary school. Conference and journal papers have a broader applied educational focus (Dyson 2008, Kelan & Lenhert 2009). Dyson (ibid) notes weak connections between generational research and educational research. Jorgensen (2003) rejects the generational differences arguing that combined effects of demographic trends, democratisation, globalisation and technology have contributed more to individuals needs.

**Generation X**

Tulgan (2000) illustrates older generations’ generally negative views of X’ers using adjectives such as “slackers, sponger, low pay low status, short attention”. Tulgan (2000, p.39) doubts “whether any generation can be captured by a single set of adjectives”. Reflection of one’s own students questions whether primarily North American and European based research applies across national and cultural boundaries. Sheahan (2005), agrees that pigeon holing groups is not valid, but claims his generation to have specific “underlying traits”.

Educational relevant characteristics seem to be:

- Comfortable with career path change.
- Adaptable, socialises easily, likes to leave valuable results.
- Likes team work but values personal acknowledgement.
- Seeks positive feedback not just negative.
- Collaboration encourages risk taking.
- Not short attention span but information sinks.
- Brought up with computer and video entertainment.
- Keen to learn, Learn by doing.
- Value flexibility.
• Requires well defined assignments then to be left alone to solve.
• Resents time wasting

*Generation Y*

Manville and Schiel (2008, p.24) identify:  
*The downside is that their career expectations often race ahead of their current abilities. Generation Y members are impatient to get ahead. Managers find that this generation needs lots of feedback and guided supervision. This group has come of age in a 24/7, "on demand" personalised environment. Face-to-face teaching is still critically important.*

The quotation above indicates strong alignment with Generation X characteristics particularly in the areas of speed of results feedback and guidance. The need for guidance does not prevent them from challenging. Shaw & Fairhurst (2008, p.373) quote “that access to that practically limitless pool of information makes Millennials particularly demanding and questioning.” Rose (2007) observes Gen Y’s attention span is short due to the exposure to technology, have a desire for instant gratification and will form teams at will.

Howe and Strauss (2003) outline seven core traits naming confidence, being conventional and team orientation, as the most important for higher education. McCrindle (2002) observes that they value peer opinion more than parents or authority figures and that they seek role models and mentors rather than instructors. This reinforces the role of a lecturer as an advisor rather than a disciplinary expert. Extensive television and internet marketing has made them sceptical about universal truths and acknowledge a wide range of beliefs are acceptable. Similar to Generation X they value membership of teams but seek wider connections at peer group and community levels. Dyson (2008) outlines how an alternative, remote school environment that nurtured the development of a specific community was successful for previously disengaged students. Sheahan (2005) describes them as resourceful, aligning with McCrindle’s view (2002) that they thrive on a challenge. Sheahan (ibid) says they expect change, are pragmatic and have no time for peripheral issues. They seek out meaningful tasks. Work is a means to an end. These characteristics align with the resentment of time wasting shown by Generation X’ers. He goes on to identify further similarities by describing them as independently dependent. A desire for feedback is also consistent but speed of response is now introduced. Erickson (2008) tabulates preferred operating styles of Y’s which align strongly with these concepts. The table also compares how most corporations actually work highlighting in places conditions at opposite ends of the spectrum. Kelan & Lenhert (2009) outline that they understand that jobs are not for life and reflect that they seek an education that provides transferable skills and recognise that this might be an ongoing process.
Combining this with this Sheahan’s (2005) observation that they are used to being entertained leads to demands that training must be relevant, interactive personalised, embedded in regular activities as well as entertaining.

*Generation Z*

According to the bands, generation Z’s would not currently be studying at tertiary institutions. Some are not clear yet that a distinct generation has emerged and sources clump teaching tips for both generations together (McCrindle & Wolfinger, 2009, Ivanova 2010, Cox 2010). There is recognition that the details are still emerging, and extra care must be taken not to draw conclusions that are primarily linked to their age rather than genuinely to their generation. Consistently the advice is that they are even more familiar with technology and develop wide communities without ever meeting many of the members face to face. Jones, Jo, & Martin (2007) propose that individual student support may be provided by Ubiquitous Agents which are software based virtual entities providing assistance thought communication at any time needed. McCrindle & Wolfinger, (2009 pp116) reinforce the need for generic learning by stating that “the average half life of a science degree is six years.” The increasing use of technology is reflected in the speed that students can access information and the media used to learn involving blogs, social networks and content embedded in gaming environments. Exposure to all the information via a wide range of media makes them discerning customers. Trunk (2009) introduces a clear differentiator from previous generations proposing that one generation can react to its parent generation. She proposes that Generation Z may not be team players and may prefer to be self directed.

**LITERATURE SUMMARY**

There appears to strong overlaps with the age ranges and not surprisingly, individual characteristics between the generations. None of the authors overtly weight one characteristic more strongly than others. Some overlapping and interdependent themes seem to span the generations and are referred to below, noting that desirable or acceptable measures change within each.

*Pragmatism*

The theme of increasing urgency be it for communication or to complete any task and move onto the next exciting activity appears to run through the generations. This urgency manifests itself in desires for relevant customised stimuli, efficient use of time, individual responsibility for actions balanced with the ability to check progress at will.
Problem solving

The increasing immediacy with which information can be acquired is willingly used to problem solve. Initial clear direction is required, followed quickly by space to be self directed. The desire for a network of contact appears to grow in reverse order for the need for face to face contact and the dependence on others to achieve.

Teamwork

Problem solving in teams is the norm but possible reversals may occur in Generation Z with a reluctance to work in teams.

Scepticism

Access to wide sources and ranges of information enables informed questioning of any facts before acceptance.

METHODOLOGY

Using content analysis, the authors have taken a two-fold approach to comparing the Team Management course details against demands of the generations. The first step maps the characteristics of Unitec’s Living Curriculum to evidence present in the course, shown in Table 2. The selections are not exhaustive but meant to illustrate the author’s perceived strong alignment with the characteristics. The second step shows characteristics of the Living Curriculum mapped against the generations in Table 3. Evidence for this mapping is drawn from examples from the delivered course which completes the connection between course outcomes and the generations. For the reasons noted in the Educating the Generations section Gen Y and Gen Z are bracketed together with specific notes where responses or needs may be different.

Responses were drawn from formal sources of student feedback mechanisms. Student use of the RFI system, individual emails from the students, the reflective journal in the individual assignment, personal observations and conversations provided informal feedback. Individual emails and reflective journals enabled identification of the generation of the correspondent.

Formal sources

Unitec Student Union’s website “Rate my Course” enables students to anonymously make any observation about a course or a lecturer at any time through the course. This is publicly available although a student id is required to submit a comment. This course drew a feedback rate of 22% (16 students) score 4.8/10. Unitec also runs a Student
Evaluation of Quality (SEQUAL) at the end of each course also run electronically, but at the end of the course. This drew a feedback rate of 22%.

*Informal sources*

The electronic Request for Information system intends to replicate systems commonly found in industry. Whilst intended to be building focussed some of the RFI’s revealed feelings about the course in general. Personal observations, student emails and assignment responses permitted interpretation of the content.

**RESULTS**

The results are shown in Tables 2 and 3.

**Table 2 – Team management and the living curriculum**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involve Complex Conversations</td>
<td>Communication with the lecturers is required to develop the brief from a set of goals to a task list &amp; to establish role play boundaries. Communication within teams is required to agree group roles and responsibilities. Communication between groups is required to co-ordinate assembly activities. A reflective assignment is a major assessment component.</td>
</tr>
<tr>
<td>Are Curiosity/Enquiry led and are stimulating</td>
<td>The assignment problem requires investigating and further definition to identify boundaries and develop solutions for construction and assembly approaches</td>
</tr>
<tr>
<td>Are Practice focussed-educating students for work, in work through work</td>
<td>The construction is full scale, uses real materials and replicates a section of a residential construction. The challenge of organising a small team replicates the work environment closely.</td>
</tr>
<tr>
<td>Are socially constructed - self sufficiency and collaboration are equally valued.</td>
<td>The whole activity requires completion as a group but 50% of the course is assessed on an individual assignment</td>
</tr>
<tr>
<td>Blend face to face and web-based learning.</td>
<td>Workshops on core skills are combined with an electronic ‘Request for Information’ mechanism. Students collaborate via the web to create group Safety Plans</td>
</tr>
<tr>
<td>Are research informed</td>
<td>Students demonstrate an understanding of fundamental problem solving and team work skills built from seminal research findings.</td>
</tr>
<tr>
<td>Have a discipline base, and are also interdisciplinary</td>
<td>Based in the use of NZ Construction standards but require manual, drawing and communication skills.</td>
</tr>
<tr>
<td>Develop literacy’s for life-long learning</td>
<td>Skills in oral presentation, business report and reflective journal writing develop literary skills. The reflective journal requires the identification of skills to be developed in the future</td>
</tr>
<tr>
<td>Included embedded assessment</td>
<td>All workshops and lectures and in class activities are designed to trial short scale, short duration examples of the real assessment events and to assist in completion of the assessment</td>
</tr>
</tbody>
</table>
Table 3 – The living curriculum, team management and the generations

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Generation X</th>
<th>Generation Y&amp; Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involves Complex Conversations</td>
<td>Should have no difficulty operating within groups required by the assignment. Might engage in broader conversations exploring the detail of the assignment before beginning than Gen Y&amp; Z. Should respond to the opportunities to chose how to construct and assemble the buildings as long as broad parameters are clear.</td>
<td>To appeal conversations must be focused and not be seen to be unnecessary or peripheral to key content. Development of team identity through face to face interaction will be valued. Likely to require justification of the broad project parameters if they limit alternative solutions. Conversations with peers required to agree solution will be the most important for Gen Y. Gen Z may resist having results depend upon others in the group work components.</td>
</tr>
<tr>
<td>Are Curiosity/Enquiry led and are stimulating</td>
<td>Challenging students who may never have used a manual tool before, to acquire new skills should appeal to keenness to learn. The flexibility of how the construction and assembly might take place will appeal to their curiosity.</td>
<td>The flexibility of how the construction and assembly might take place will appeal to their resourcefulness. The challenge must have sufficient direction to prevent developing a sense of time wasting.</td>
</tr>
<tr>
<td>Are Practice focussed - educating students for work, in work through work</td>
<td>Gen X students in tertiary study now are likely to be in a career changing situation. The real work focus of the actual project should appeal. The future use of project buildings as a training tool for plumbers and then as bike sheds will emphasise their value in the future.</td>
<td>Creation of a real building should appeal to the desire of a challenge and emphasise a meaningful task. “Hands on” nature should appeal.</td>
</tr>
<tr>
<td>Are socially constructed - self sufficiency and collaboration are equally valued,</td>
<td>Will appreciate the opportunity to show individual ability through the reflective journal along with the 50% weighting.</td>
<td>Assignments require collaboration to produce a safety plan and an oral presentation. Gen Z may not want to be part of a team where marks are shared or depend upon each other’s performance.</td>
</tr>
<tr>
<td>Blend face to face and web-based learning.</td>
<td>Will comfortable using technology to help find solutions to problems and using the electronic RFI mechanism.</td>
<td>The need to search out sensible safety plans and to utilise web based question and answer mechanisms should appeal to their comfort with technology.</td>
</tr>
<tr>
<td>Are research informed</td>
<td>Underpinning course principles and processes with a knowledge base from wide research into team work problem solving and communication principles should appeal to their desire to be “information sinks”.</td>
<td>Unless team work and problem solving theory is clearly applicable this could frustrate their pragmatic approach and fuel suspicion about the value of theoretical research findings to real world problems.</td>
</tr>
</tbody>
</table>
Have a discipline base, and are also interdisciplinary. The need to combine foundation management tools, trade skills and oral communication competencies will appeal to the desire to broaden their skills. Many students see the building project as the key focus of learning rather than the vehicle for demonstrating team management skills. Interdisciplinary links will require justification to avoid perception of being unnecessarily peripheral.

Develop literacy’s for life-long learning. Skills that might not be needed immediately, in particular formal business report writing align with keenness to learn new skills. The case for skills that might not be needed immediately must be made strongly to prevent frustration.

Included embedded assessment. Frequent, formative feedback will be required blending acknowledgement of things done well as well as things to improve. Breaking assessment into four parts, enabling improvement in the latter parts should appeal. Lectures and tutorials focus on theory content and skills required to complete the project, write reports and reflective journals. The business report requires the documentation of a safety plan for the project. This should appeal to their pragmatic approach where all activities are leading to assessment events. Will value faster more frequent feedback than Gen X.

**Student profile**

According to the age criteria noted in Table 1, the class of 71 students comprise:

1. Baby Boomers (born before 1960)
2. Generation X
3. Generation Y

The results below represent the bulk of the formal student feedback received that has been received and collated under subheadings that link back to key characteristics of all three generations. Quotes are transcribed as written.

**Pragmatism**

“*Totally agree with the Dept of construction in putting an emphasis on building something building/construction related. Not just cardboard bridges*” (2009 assignment)

“The mark schedule could also be improved; many of the points were very broad and hard to define.”

“Poorly thought out mark schedules.”

“*Great learning curve for students and lectures after the muck up on the initial construction day.*”
“For a tertiary subject it often felt like an overly nit-picky primary school class. The building exercises were a good idea but marks were distributed unfairly and teams were very uneven. Definitely needs more organisation on the lecturer’s part.”
“A good course and the intentions of the course were potentially very good, but it suffered from being too often disorganised.”
“Some of the web links [the lecturers] have in the notes were changed in 2003.”
“Poorly thought out recommended texts. Timeframe for paper content far too short. Complete lack of needed course information. Wrong and poor lecture information provided.”

The pragmatic nature of the generations is demonstrated very strongly. This formal written feedback is further supported with strong informal lobbying to reduce the time to construct and assemble the buildings.

Frustration with mark schedules was surprising. The mark schedule outlining detailed components for each mark was required to be included with submissions demonstrating of its use as checklist. On occasions this was omitted, along with key components of the assignment.

The disorganisation and “muck up” referred to which drew many informal verbal responses involves inaccuracies with drawings and the delivery of incorrect quantities of materials hindering progress on the first construction day. The lack of information referred to, illustrates a negative response to problems designed to encourage exploration of a problems scope and also to enable a range of potential solutions.

A concern about the imbalance of the manual skills of the student teams is expressed on numerous occasions, despite only 10% of the marks being allocated to the physical construction and assembly.

**Teamwork**

“I did not realise how much work it takes to work in a team”
“Conflict is important...focusing on finding a solution, not blaming”
“I learned the importance of listening”
“This session provided me with a great introduction on how to manage and be part of a large team”
“The phrase people skills finally made sense”
“The only problems I had were with the team allocation - however there is little which can be done to improve this”
“Random allocation of students to teams doesn’t really work.”
“This course was very helpful in providing the basis for getting the best out of a team and running team meetings. Most of that learning came in the individual report in which I learnt a lot. The problems encountered during the construction phases were no different to those on any other project site.”

“The students showed a lack of interest, and were prone to politicize the situation. This showed in the lack of interest when we tried to get a health and safety committee organized. Only two people showed up and contributed”.

The students demonstrate comfort with working in teams and in their assignments students articulated some very valuable learning about the key outcomes. However pragmatism ruled and when teamwork threatened progress or marks dissatisfaction rose quite quickly. A bonus mark for the fastest completion is quoted widely as being a reason why on assembly day, only the skilled students contributed trading off the involvement of the wider team members.

**Scepticism**

“I respect your thoughts on what you think goes on in the real world but in the building industry that I am involved in, at no time would I accept this brief or task such that you have submitted. I would go away and simple throw it in the bin and think what a waste of my time.”

The above response via email was from a Gen Y student. Others who claimed to have significant experience felt the project contained uncertainties not present in their experience of the real world. This was balanced by a Gen X’s view in response to the comment:

“My experience is that you don’t have to work in the industry very long before you come across difficult, ill-informed or unspecific clients”

The same Gen Y student went on to observe:

“And as of having to fill out so called RFI’s what is wrong with just emailing directly to you or your pairs? I believe this is just another case of paper pushing.”

Informally, inaccuracies with drawings and material deliveries were challenged by Generation Y students as being at odds with real construction experience, despite the incomplete material delivery being a very real interaction with a materials supplier. A number of other parameters set in the assignment were challenged. The elimination of the use of power tools due to safety reasons was questioned.

**Problem solving**

“Unpacking and checking of the timber packet was not advised as a required task until Construction day.”
“Being told the forklift wouldn’t be available until 10:30am on assembly day. Then being available for the whole time.
“The nails running out on Construction day 1”

Whether factually accurate or not this illustrates both pragmatism and some unspoken assumptions about how far students were expected to define the parameters of the problem and search out their solutions.

REFLECTIONS ON STUDENT RESPONSES
The anonymity of most responses prevent matching views to generations and analysis under the headings do not reveal clear generational boundaries. This is not unexpected as the literature analysis summary observes that the boundaries between generations are blurred and characteristics are not mutually exclusive. A 22% response rate is also not large enough predict the feelings of the whole class. However, the theme of urgency appears to run strongest with concern being expressed about apparent lack of organisation and lack of clarity with regard to some of the tasks being set. Problems designed to enable a multitude of solutions were sometimes interpreted as disorganisation implying some impatience with the problem definition stage. This reinforces the observations that whilst conversation and enquiry led challenges gain student engagement, clear boundaries limiting the scope of problems need to be set. Anticipating the uncertainty they may feel, putting it into context and tacitly linking it to desired characteristics of their generation and the real working environment may reduce discontent. Documenting the assignment in more detail to improve clarity may simply create more words to interpret differently and a facilitated question and answer session in a face to face mode or via electronic social networking technology may prove more successful.

Students were very comfortable with challenging or criticising any feature of the course they thought required it and did so with a confidence that often exceeded their experience. This aligns with Shaw and Fairhursts’ (2008) findings of McDonald’s graduate trainees, observing:

“A growing tendency to identify external factors as contributing to outcomes(particularly negative outcomes) means that training programmes will receive increasing levels of criticism from participants if they fail to effectively develop them, rather than participants acknowledging that they could have worked harder or shown more commitment”

One very positive aspect of the challenging nature was a granted request for the organisation of a “roof shout” to celebrate the successful conclusion indicating a strong appreciation of the need to recognise team performance and the collective class achievement.
The need for links with a wide community outside of the class is not overtly strong in the course, limited to the need to consider Unitec health and safety policies. Contrary to the literature, its absence does not draw negative comment. Students tended to focus inwards on their own team of 5 or their building team of 25 rather than seek much interaction across the class of 75. This resulted in some inefficient use of shared resources on assembly day.

CONCLUSION
The literature review identifies strong overlaps between the generations’ characteristics. Headings used for discussion in the literature do not appear consistently across the three generations being investigated. The authors have proposed Pragmatism, Teamwork, Problem Solving and Scepticism as headings that facilitate cross generational analysis. The course maps closely to the Living Curriculum. In turn, Unitec’s Living Curriculum maps closely many of the desired characteristics of the generations noted in the literature. However this closeness does not insulate the course from student dissatisfaction. Pragmatism and the need for urgency appear to build with the generations and increasingly dominate student engagement with the course. There is low tolerance for broad problem solving activities where they feel their time is wasted and this manifests itself in scepticism for the overall task and the value of some details. This also runs through teamwork where students engage enthusiastically until it appears to threaten efficiency or equity. This characteristic may be exaggerated when educating Generation Z students.

The pragmatic demands can be at odds with the reflective nature of the living curriculum and need for complexity demanded by problem solving challenges, team work based activities and suitable intellectual challenges of an undergraduate qualification. Experiential, practice based learning environments might also inherently challenge students to grapple with issues that will take time to solve. Analysing student feedback of other courses under the headings of Pragmatism, Teamwork, Problem Solving and Scepticism will identify if these findings apply widely. If consistency is found then they can be used as useful guidelines to help balance the complexity and uncertainty required by the level of qualification with the need for urgency required by current and future generations.

REFERENCES


