TUNING INTO GEN-Y LEARNERS: AN ENGAGEMENT CATALYST

Jerry Chong Chean Fuh
School of Technology, Faculty of Computing, Engineering & Technology
Asia Pacific University of Technology and Innovation (APU)
jerry@apu.edu.my

Anita Paul
Victoria University – Australian Business Programme
Sunway University College
anitap@sunway.edu.my

ABSTRACT

The Generation that sits in our classrooms have specific traits that make them different from previous generations of learners. As Educators, how do we respond to these notable traits? How can our delivery approach to suit Gen-Y learners be enhanced? This is a review paper with literature to support a recommended approach consisting of two basic methods; practicality and personalisation. These methods can complement each other in teaching if it is synergized with a 'pursuit' which can support the learning outcomes as add-ons to delivery approaches that can enhance classroom atmosphere and serve to engage students with an end goal in sight. Observations from two case studies are related offering two different perspectives of using the recommended approach and the effectiveness of this applying approach is discussed.

Field of Research: *Practical Teaching, Personal Approach, Gen-Y, Teaching & Learning, Student Engagement, Active Learning and Gamification.*

----

1.   Introduction

It is safe to say, teaching at tertiary level has never been this challenging. With an escalating amount of students enrolled in classes at tertiary level, the rise in numbers is significant throughout most countries in the world across continents(Biggs ,1999; Mulryan-Kyne, 2010). This naturally brings forth new challenges in the dimension of teaching and learning. Academicians have researched and debated on various pedagogical delivery approaches in the same time the target learners in discussion evolved in terms of characteristics and background. The generation Y, known to be born between 1985 - 1995 fill our classroom seat with very different expectations and motives for learning(Krause,2005). According to Schofield and Honore (2010), Gen-Y does not only hold preferences but expectations. The focus of this change sets the tone for this research where the identifiable generational differences as experienced in the classroom, further induces the significant need for response to this change. Weaver and Qi (2005) states although most instructors acknowledge the value of active participation in the college classroom, achieving success in eliciting it appear more difficult. There has already been record of also low participation levels, poor engagements and less commitment to the course (Biggs, 1999; Carbone and Greenberg, 1998; Ward and Jenkins, 1992; Gibbs, 1992). Wilson (2004) also highlighted that traditional methods of instruction will no longer suffice in a society that has encountered "a paradigm shift from emphasizing teaching to emphasizing learning". Active involvement in class facilitates critical thinking (Garside, 1996) and facilitates the retention of information that might otherwise be lost (Bransford, 1979 as cited in Weaver and Qi, 2005).

In this research, student engagement is uplifted as a means to facilitate the changing demographics and diversity of learners in higher education. Krause(2005) asserts that engagement has become a pivotal focus of attention as institutions locate themselves in an increasingly marketised and competitive higher education environment. According to Axelson and Flick (2011, p 39), student engagement refers to "how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other". A more comprehensive viewpoint was covered by Fredericks, Blumenfeld and Paris (2004), who discussed three different dimensions of student engagement, namely, behavioural engagement, emotional engagement and cognitive engagement. Harper and Quaye (2009) expands the concept further by stating that engagement is more than involvement or participation – it requires feelings and sense making as well as activity.

This review paper aims to produce an overall assessment on Generation Y notable traits from previous authors and associated issues surrounding them. It then serves to provide a workable approach as a proposed solution, using both practical and personalized modes of teaching. Lastly, a linkage is established between the two and the proposed concept is given a holistic view.

2.   Literature Review
2.1.   Gen-Y Traits and Issues faced in Teaching Gen-Y Learners

In effort to understand Gen-Y better and in cautious attempt not to stereotype them, there are notable commonalities identified from past research of Gen-Y that could influence higher education. Pastorino (2006) supported this notion by highlighting inherent generational differences that impact teaching and learning. Prensky (2001) gave us a good perspective on the generational differences by referring to Gen-Y as 'digital natives' who were born into a world of technology and lived their life depending on it whereas the generation before who were not born into the digital world need to adopt into it.

Specifically speaking and drawing from a host of literature, Gen-Y are noted to have boredom issues as identified by Mann and Robinson (2009) who quoted a significant finding from a survey of 211 British university students indicating that 59% found lectures boring in at least half of their classes and 30% find most or all of their lectures boring. Berk (2009) had cited from (Pryor et. al., 2009) where the national survey conducted by UCLA Higher Education Research Institute which covered nearly 250,000 college freshman at more than 500 colleges and universities found that 40% of the students report that they are frequently bored in class. This was echoed by Rosegard and Wilson (2013) who linked the issue of boredom to attention, academic performance and motivation. Educators should be aware that the issue of boredom lies in the fact that Gen-Y is by nature a restless generation with short attention spans (Schofield and Honore, 2010; Kandlbinder, 2010).

On a more positive and encouraging note, Brown (2000) and Monaco (2007) noted that they prefer active rather than passive learning. Gen-Y accustomed to interactivity (Feiertag and Berge, 2008) and desire for team collaboration (Bracy, Bevill and Roach, 2010). They like to be heard and have their opinions declared and prefer to collaborate rather than command (Pastorino, 2006). The notable specific traits on generational differences presents an opportunity to capitalize on Gen-Y's strengths to explore, exploit and employ more effective teaching and learning methodologies in the classroom.

2.2.   The Significance of being Personal

Gone were the days that educators in higher education can stand in front of the class as authority figures in command and control . The breed of learners witnessing this kind of teaching would have more reasons to miss classes, loose focus and possibly fail from lack of connection or motivation. With Auster and MacRone(1994), promoting a close ties with faculty-student interaction as it might yield benefits in terms of decreasing the social distance between professors and students, the implications are for perceptual barriers to decrease. Referring to Metz (2011) the best tool in a classroom is an enthusiastic teacher who can connect with students on a personal level.

Personalization in this research typically refers to being able to relate to the concept/theories or textbook material on a deeper and more individualized manner. Chickering and Gamson (1987) were the earlier researchers who indicated that 'they must make what they learn part of themselves'. The findings of Revell and Wainwright (2009) indicate among other elements that what makes a lecture 'unmissable' is a personal approach to teaching that can strengthen the rapport with students. The 'personal touch', seem to be an active component in any service delivery, can bring about many blessings in the classroom in delivering lessons. Research indicates large university classes and the associated problems with 'disengagement' (Mulryne-Kyne, 2010; Biggs, 1999; Carbone and Greenberg, 1998; Ward and Jenkins, 1992; Gibbs, 1992). Hence, it would make sense to use a personalized approach to engage students with self-expression, experiential sharing or prompting students to relate subject matter to their own lives.   Oblinger and Oblinger (2005) affirms that one of Gen-Y traits are that they are indeed experiential learners.

An example of this would be to ask the students to relate how did the economy crisis affect them as students in terms of going on dates and spending on various forms of entertainment as a start to a lesson on 'economic factors'. A further example would be for the lecturer to share on workplace deviances that took place in previous jobs such as the extent of an office romance or a encountering a 'bully boss'. These personal anecdotes, when narrated from a particular perspective can induce further reflection on subject matter. As Kadembo (2012) indicated that the learner can relate to a mirror of life by looking at the past, which helps them understand the present.

Personalized learning is specifically tailored to each student's strengths, needs, and interests while uncompromising on standards of quality teaching . This approach is a major paradigm shift from the traditional "one-size-fits-all" approach to education to a more 'customized' appeal. Personalization encourages educators to be more open and flexible, so that students can become more invested in designing their own personal learning paths' (Grant and Basye, 2014).

Rosegard and Wilson (2013) established the Universal Design for Learning which emphasizes on the multiple means of representation, expression and engagement. The main reasoning behind these principles would be to guide the process of selecting tools and techniques in accordance to individual differences and minimize barriers to assist students to achieve an overall comprehension towards the subject matter. Learners require various ways of acquiring information and knowledge, whilst to provide learners alternatives for demonstrating what they know as well as to tap into learners' interests, challenge them appropriately, and motivate them to learn, thus providing them a form of wholesome option for learning. This principle reflects the importance of personalizing which includes individualizing teaching to ensure that the student utilizes the interest of understanding through the power of relation. The act of personalizing here would be mainly to reflect on specific individuals and to respond to their needs.

2.3.   The Significance of being Practical

Practicality in the context of this research focuses on applying real-world scenarios, real-life examples and relating to current best practices or products to illustrate the lesson. Considering the Gen-Y trait of wanting to know how it relates to themselves, realism and relevance draw appeal and delivers a deeper approach to learning (Pressley, 2006; Revell and Wainwright, 2009). As Pressley (2006) notes that when education needs to be focused on applicable skills that will help them meet their goals and if it is tied to the "real" world, *millennials* will be more inclined to think it is important and devote energy to learning the information.

This ultimately serves the purpose of responding to the industry needs; when a practical outlook on lessons could build a more informed idea of the future workplace and career. Many authors have studied the career mismatch and inadequacy of graduates in being ill prepared for the industry (Miller and Liciardi, 2003; Feiertag and Berge, 2008; Chapman and Lim, 2004). Hence, it only makes sense to infuse practical aspects of various industries in lessons such as discussions of real-world applications; true cases or workplace incidents from existing companies or stories of their products and brands. As Black (2010), supports that through this organizational frame of reference, students would enhance understanding and appreciate the relevant context within the subject matter.

Echoing more demand for a broader outlook and enhanced practical skill, a lesson appears more relevant to a Gen Y student if it is infused with real-time happenings. Hence, connecting industry related issues with academic delivery. An example of this method would be to narrate the specific struggles a famous CEO went through to illustrate good points of leadership and motivation. Further to that example is to relate the challenges of global business by mentioning how Malaysian Brands such as what Secret Recipe or Old Town White Coffee went into the global market. After all, practicality is meant to cement the link between theory and practice (Kumaravadivelu, 2006).

2.4.   The Significance of a Pursuit

As educators embark on more personal and practical methods to deliver modules, it is with fervent hope that these methods could lead to more visible and experiential outcome to assess whether it is well received and effective. In short, it is to see the input of the students by and from the students. This can only be achieved if the students are facilitated through non-assessment based activities where the students becomes the 'driver to steer through the class' and to exhibit what they have learnt. Adler (1987) proposed to move away from memorization with 'process of discovery where the student is the main agent and not the teacher'. Doyle (2011) supports the learner-centered teaching that focuses on getting students to do the work. The more competitive the better as Lei (2010) states that students learn best when they are mentally or physically alert making them active participators in the learning process

'Pursuit' here would mean to facilitate the students through some form appealing task or goal to achieve that would possibly spark curiosity and sustain interest. Rosegard and Wilson (2013) asserts that the use of an external stimulus is used to heighten arousal which is responsible for activating mechanism like attention and memory moving them from sleep to alertness. Other authors support that with curiosity, situational interest should result from exposure to a relevant external stimulus that elevates arousal and in turn holds attention and focus (Anderson, 2005; Calvo and Lang, 2004). In other words, this would be the part to see if the message of the lesson delivered through both the personalization and practical way was effectively transmitted to the students.

The earlier researchers indicated that a change in approach should be induced to entice student learners. In support of this notion, active learning has been avidly discussed in numerous prior research (Bonwell and Eison, 1991; Mc Carthy and Anderson, 2000; Prince, 2004; Paulson and Faust, 2010). Active learning strategies are ideally infused to maximize participation while being student-centered and thus making it less passive (Mc Carthy and Anderson, 2000). It is when activities in class stimulate interest and inquiry which can be labelled as the 'intrigue' factor. When students are involved in doing things and thinking about what they are doing (Bonwell and Eison, 1991), this suits the Generation-Y trait of being 'hands on' and 'learn by doing'. The 'pursuit', as explained above, is in line with the elements of active learning. Fayombo (2012) established that active learning strategies are effective in engaging learners and assisting them in creating their own learning experiences in the changing environment. The implications of this sync with the conception of 'pursuit', which is a quest or search for something with an end goal in sight.

3.   Case Study/Scenario: Sealing the Link between Personal and Practical

3.1.   In Teaching Management Modules
3.1.1.   Demographics of students

These were first year Management students who were not as exposed to application of theories. The entire class size was 168 and it was broken into 7 tutorials groups of 24 in each class. These consisted of mostly local students with a fraction of internationals.

3.1.2.   Background of Topic & Problems Identified

The topic was on Motivation where many motivational theories were taught to them in lecture as part of the syllabus. I found that most of the students used the memorization technique, cramming as many terms of these theories instead of fully comprehending what the components are and how would it work in real life. Another challenge was that with a tutorial time of merely 1 hour, it was almost impossible to cover the testing of understanding of all theories within that hour, considering that any of these theories could be asked in the exam.

3.1.3.   Procedures (3P's)

The students were split in groups in the tutorial classes where good friends and couples were separated. Each group was then asked to select by blind ballot a specific motivation theory to master. They will be 'interviewed' by the facilitator as a group and will be asked three questions:

First Question – What is this theory about and what are the components/ (this is purely fact based and students needed to know the terms)

a.   The Personal Approach

Second Question – How is this theory applicable to you in real-life? Please share a personal experience where it relates to the theory and its components

The students could pick one or two volunteers in the group to share on a particular experience and they are free to reflect and relate to any 'productive' experience in the past. As supported by (Chickering and Gamson, 1987), this is to encourage talking about what they are learning, relating to experiences, applying it to their daily lives so they make what they learn part of themselves.

b. The Practical Approach

Third Question – How is this applicable if you were a manager of Company X and were managing these staff in this department?

Each group were given a company name card from various industries; fitness, telecommunications, airlines and another two volunteers should explain how they as managers to that particular department could use the theory to motivate their staff and also how it can show demotivation.

c. The Pursuit Feature

There was a bit of exciting competitive element used here where the groups were told that if their group could answer the above questions without bluffing their way through demonstrating some firm understanding of the concept, they could leave early. If any member in the group could not explain how it is applied or the components, they were told to go back to their seats and come back for another round.

3.1.4. Outcome Observed

It was found that although the students were told they could leave early, very few actually did. Many of them stayed back to see how their other peers from their teams fared in the'; interrogation' and they learnt how the other theories were applied as well.

What was heartening was to observe that team leaders that emerged in the group, those with strong personalities and all members became responsible for the other as they tried to coach the weaker ones. As Weaver and Qi(2005) pointed out from Gareth(1986), students interaction and influence with their peers give meaning to their educational experience and forms the way students construct their reality .

From this exercise, they were enlightened by 'themselves' toward looking beyond the theory as they applied it specifically to themselves and with reference to an existing company .Both the practical and personal approach were synergized in this activity which brought about the desired 'arousal' and excitement and competitive element till the objectives were achieved. It was evident that students interest on subject matter was stimulated. As Ericksen(1984), students learn what they care about and remember what they understand .

3.2. In Teaching Information Technology
3.2.1. Demographics of Students

The students are mainly from the foundation programme going through their final semester. The module is required to be taken by students who intend to pursue their degrees in IT. The total number of students was at 40 and the activities being carried out was during the tutorial session. Students are from various international backgrounds with a minority group of local students.

3.2.2. Background of Topic & Problems Identified

'Perspectives in Technology' is an introductory module intended to provide students an overview of different areas of technology and its application. As part of the module, the specific topic was related to Alternative Technology where the students were required to do a research on their selected technology and find out what are the spin-offs from their respective technologies. On a weekly basis, there would be a task provided to keep track of their progress that will be a compilation of their overall module assessment. Due to the weekly tasks provided, students tend to lose interest and see it as a boring routine, this has contributed towards the ineffectiveness of the outcome of the topic and module as a whole.

3.2.3. Procedure (3P's)

a. The Personal Approach

Students were given the option of a choice of a technology they use on a daily basis that they're interested in and to do a research on the application of the technology. Students are encouraged to choose a mobile or web application and this sparked interest on a personal basis as the students are relating it to their very own personal experience of using the technology. The student's range of choice for the technology is along the lines of relating it to their real life application of the technology and therefore allowing them to see the module in a personal mode.

b. The Practical Approach

Practicality comes in when the students are asked to feature their selected technology based on questions posed to earn extra credits. The real life experience comes mainly from the aspect of getting the students to be part of the company, promoting and publicizing the technology as their very own product. The questions posed to them would be cultivating the perspective of them engaging themselves as owners of the technology. In groups, they would be handling the weekly tasks addressing real world problems currently faced by the companies and they would propose different solutions or options of what can be done based on alternative options.

c. The Pursuit Feature

Students are then evaluated based on the general question posed every week on whether they have conducted their tasks accordingly. Based on the answers given, students are then placed on a scoreboard reflecting points obtained and accumulated over the weeks. The scoreboard was able to ignite a certain level of interest from the students and they are all motivated enough to ensure that they attempt to be on top of the scoreboard. The form of pursuit is reflected the most here within the application of *gamification* where the students are encouraged to experience the aspect of competitiveness within an academic context (Erenli, 2013; Glover, 2013; Rughinis, 2013; Liu and Peng, 2013).

3.2.4. Outcome Observed

Students were seen to be very responsive towards the application of the activities and were able to maintain a certain level of interest throughout the semester when it comes to the comprehension of the module. To be fair, one of the factors that have helped established a high level of commitment from the students was the fact that it is coherent with the module assessment. The feedback obtained from the students was encouraging, mentioning mainly that the level of involvement could be easily maintained as they were viewing the module and the task to be completed, more as an

insightful undertaking, rather than a compulsory chore, which is also highlighted by Jayasinghe and Dharmaratne, (2013).

4. Conceptual Approach Introduced (Diagram Of The Engagement Catalyst)

At this unique juncture of the research paper, the term 'pursuit' is coined to seal the two approaches of Personalization and Practicality together. The concept of pursuit forms the link to solidify a holistic approach to engaging Gen-Y. This approach is deemed only to serve as a guideline of the contextual method in appealing towards Gen-Y
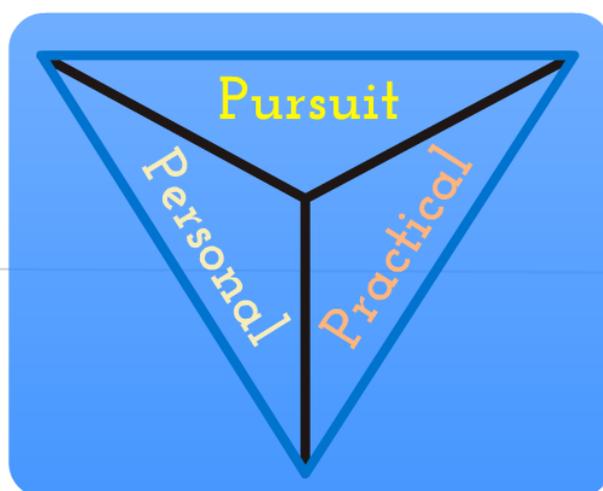
5. Comparison: Different Conditions but Similar Outcomes

The comparison is done here to display the difference of the conditions these methods were being carried out. The characteristics and manner of comparison is reflected through the field of study which covers Information Technology and Management areas of study. The differing size of the class was also evident where one was a class of 40 students versus a class of 200 students which are also handled in separate sessions under a tutorial and lecture respectively which involves the nature of class.

There is also the comparison of the type of syllabus where the IT module is home-grown, locally developed in a university in Malaysia and the management module is a foreign adopted module from the U.K. The final comparison is in terms of the type of students across the two modules where one is mainly made up of local students and the other is a majority of international students of various backgrounds. The duration is also reflected upon to show the difference between handling two different sessions across a 1-hour and a 2-hour period.

PERSPECTIVES IN TECH	COMPARISON	ORG BEHAVIOUR
40 pax	*Class Size*	168 pax
Info Tech	*Field of Study*	Management
2 hours	*Duration of Class*	1 hour
Mainly International Students	*Demographics*	Mainly Local Students
Tutorial	*Nature of Class*	Lecture
Homegrown	*Syllabus*	International

8

As a result of the very different conditions where the approach was carried out, the outcome however, was significantly similar. Student demographics overall in all the different comparison somehow did not affect the mode of implementing and carrying out the approach as mentioned. The reason behind the comparison is to show that the approach does not need to be concerned with the student demographics or even the nature of their study. The engagement method is directed at the understanding of the conceptual techniques and carrying the steps out on a contextual manner, directing the activities mainly at the students depending on the module taught.

6. Conclusion and Recommendations

The overall proposed solution is to adapt the engagement catalyst and applying through the concepts of Personalization, Practicality and Pursuit in the teaching and learning environment. This engagement catalyst is only proposed as an approach and it is applicable in many different ways. The role of the educator is mainly seen here, as a coordinator or facilitator, where guidance is provided and the activities chosen to be done would serve more as a form of a challenge for students to discover and explore based on their own initiative, instigated by their need to compete and sense of belonging.

Educators are advised to consider these engagement techniques as the current scope of learners are categorized well within the group of Gen-Y learners. The involvement of students within both of the groups would considered to be a typical group of students encountered by educators in universities today. The scope of research was conducted across two different universities, providing a much more comprehensive view within the context of higher education.

Within the near future, an all-inclusive and wide-ranging research would be conducted with the consideration of statistical proof and involvement from even more groups of students to ensure that the results reflected were not a one-time instance. Further research would also be reflected with the inclusion of the applying the approach in other fields of study.

7. Limitations and Future Research

This research paper is a progressive topic that is meant to be explored and developed further. The researchers hope to receive ample student feedback on the effectiveness of this approach in teaching and learning with special attention to students academic results. The researchers also aim to bring the concept as good practice outside the scope of the academic world; to deal with Gen Y in various circumstances. This is to be further explored.

Acknowledgement

References

Adler, M. J. (1982), *The Paideia proposal: An education manifesto*. NY: Macmillan

Anderson, A. K. (2005), Affective influences on the attentional dynamics supporting awareness. *Journal of Experimental Psychology: General*, 134, 258–281. doi:10.1037/0096-3445.134.2.258.

Auster, C. J., & MacRone, M. (1994). The classroom as a negotiated social setting: An empirical study of the effects of faculty members' behavior on students' participation. *Teaching Sociology, 22, 289–300.*

Axelson, R.D., & Flick, A. (2011), Defining student engagement. Change: *The Magazine of Higher Learning,* 43, 38-43.

Berk, R. A. (2009), Teaching Strategies for the Net Generation. Transformative Dialogues: *Teaching and Learning Journal,* Volume 3 Issue 2 November

Berry, W. (2008), Surviving lecture: A pedagogical alternative. *College Teaching*, 56(3), 149-154.

Biggs, J. (1999), Teaching for quality learning at university. *Oxford: Society for Research into Higher Education and Open University Press.* Available from http://biblioteca.ucv.cl/site/colecciones/manuales_u/49657968-Teaching-for-Quality-Learning-at-University.pdf

Black, A. (2010), Gen-Y Y; Who they are and how they learn. *Educational Horizons*. Winter 2010. Pg 92-102

Bonwell, C.C. and Eison, J. A. (1991), Active Learning: Creating Excitement in the Classroom, *ASHEERIC Higher Education* Report No. 1. Retrieved from: http://www4.ncsu.edu/unity/lockers/users/f/vfelder/public/Papers/Prince_AL.pdf

Bracy, C. Bevil, S. and Roach, T. (2010), The Millennial Generation: Recommendations for Overcoming Teaching Challenges. *Proceedings of the Academy of Educational Leadership*, Volume 15, Number 2.

Bransford, J. D. (1979), *Human cognition: Learning, understanding and remembering*. Belmont, CA: Wadsworth.

Brown, J.S. (2000), Growing up digital: How the web changes work, education and the ways people learn, *Change,* 32 (2), 10-20.

Calvo, M. G. & Lang, P. J. (2004), Gaze patterns when looking at emotional pictures: Motivationally biased attention. *Motivation and Emotion*, 28, 221–243.

Carbone, E. and Greenberg, J. (1998), Teaching large classes: Unpacking the problem and responding creatively to improve the academy, *New Forums Press and Professional and Organisational Development Network in Higher Education*. Vol. 17, ed. M. Kaplan, 311_16. Stillwater, OK:

Chickering, A. W., and Gamson, Z. F. (1987), Seven Principles for Good Practice. *AAHE Bulletin* 39: 3-7. ED 282 491. 6 pp. MF-01; PC-01

Doyle, T. (2011), *Learner-centered teaching: Putting the research on learning into practice.* Sterling. VA: Stylus Publishing

Erenli, K. (2013), The Impact of Gamification-Recommending Education Scenarios. *International Journal of Emerging Technologies in Learning (iJET)*, 8(2013), pp.15--21.

Fayombo, G. A. (2012), Active Learning: Creating Excitement and Enhancing Learning in a Changing Environment of the 21st Century, *Mediterranean Journal of Social Sciences*, Vol 3 (16) December 2012

Feiertag, J. and Berge, Z. L. (2008), Training Generation N: how educators should approach the Net Generation. *Education þ Training* Vol. 50 No. 6, 2008 pp. 457-464

Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59 – 109.

Garside, C. (1996), Look who's talking: A comparison of lecture and group discussion teaching strategies in developing critical thinking skills. *Communication Education*, 45, 212–227.

Gareth, M. (1986). *Images of organization*. Newbury Park: SAGE Publications.

Gibbs, G. (1992), Control and independence. In Teaching large classes in higher education: How to maintain quality with reduced resources, , 37_59. London: Kogan Page.

Glover, I. (2013), Play as you learn: gamification as a technique for motivating learners. AACE.

Grant, P. and Basye,D (2014), Personalized Learning: *A Guide for Engaging Students with Technology*. Retrieved from http://www.k12blueprint.com/personalized-learning-

Harper, S. R. & Quaye, S. J. (Eds.). (2009), Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations. New York: Routledge.

Jayasinghe, U. and Dharmaratne, A. (2013), Game based learning vs. gamification from the higher education students' perspective. pp.683-

Kumaravadivelu, B. 2006. TESOL methods: Changing tracks, challenging trends. *TESOL Quarterly* 40 (1): 59-81.

Lim , H.E.(2008), 'Feasibility of Early Identification of Low Employability Graduates in Malaysia', *Malaysian Journal of Economic Studies*, Vol 45 No 2, pg 95

Liu, P. and Peng, Z. (2013), Gamification interaction design of online education. pp.95--101.

Kadembo, (2012), Anchored in the story: The core of human understanding, branding, education, socialisation and the shaping of values, *The Marketing Review*, 2012, Vol. 12, No. 3, pp. 221-231

Krause, K.(2005), Understanding and promoting student engagement in university learning communitiesSharing Scholarship in Learning and Teaching: Engaging Students, James Cook University,Townsville/Cairns, Queensland, 21-22 September 2005

Krause, K. (2005a). The changing student experience: Who's driving it and where is it going? Keynote paper presented at Student Experience Conference: Good Practice in Practice. Charles Sturt University, Wagga Wagga, New South Wales, 5-7 September 2005.

Mann, S. and Robinson, A. (2009), Boredom in the lecture theatre: An investigation into the contributors, moderators, and outcomes of boredom among university students. *British Educational Research Journal,* 35(2), 243–258

McCarthy, J.P and Liam,A.(2000), Active Learning Techniques Versus Traditional Teaching Styles: Two

Experiments from History and Political Science, *Innovative Higher Education*, Vol. 24, No. 4, Summer 2000.

Miller, S. and Liciardi, R.(2003), Tertiary student perceptions of the benefits of professional career management education: and exploratory study, *Career Development international,* 8/6 , 309-315.

Monaco, M. and Martin, M. (2007), The millennial student: a new generation of learners. Athl Train Ed J. ;2:42-46.

Mulryan-Kyne, C. (2010), Teaching large classes at college and university level: challenges and Opportunities, *Teaching in Higher Education*, Vol. 15, No. 2, April 2010, 175_185

Oblinger, D.G. and Oblinger, J.L. (2005), Educating the Net Generation, Educause e -book available from www.educause.edu/educatingthenetgen/ [Accessed 4 August 2006]

Pastorino, E. E. (2006), When generations collide in the classroom. *E-xcellence in Teaching*, 8.

Paulson, D. R. and Faust, J. L. (2010), Active Learning For The College Classroom. California State University, Los Angeles, CA, 90032 Retrieved from: http://www.calstatela.edu/dept/chem/chem2/Active/

Pressley,L. (2006), Teaching Milleneals:Library Instruction for the Next Generation.

Prince, M. (2004), Does active learning work? A review of the research. *Journal of Engineering Education,* 93(3), 223–231

Pryor, J. H., Hurtado, S., DeAngelo, L., Sharkness, J., Romero, L. C., Korn, W. S., & Tran, S. (2009). The American freshman: National norms for fall 2008. Los Angeles: *Higher Education Research Institute*, UCLA

Revell, A and Wainwright, E. (2009), What makes Lectures 'Unmissable'? Insights into Teaching Excellence and Active Learning, *Journal of Geography in Higher Education,* Vol 33, No 2, 209-223. May

Rosegard, E. and Wilson, J. (2013), Capturing students' attention: An empirical study*, Journal of the Scholarship of Teaching and Learning,* Vol. 13, No. 5, December 2013, pp. 1 – 20.

Rughinis, R. (2013), Gamification for productive interaction: Reading and working with the gamification debate in education. pp.1--5.

Schofield, C. P. and Honore, S. (2010), Generation Y and Learning, *The Ashridge Journal*, Winter 2009-2010,pg 26-32.

Ward, A. and A. Jenkins. (1992), *The problems of learning and teaching in large classes. In Teaching large classes in higher education: How to maintain quality with reduced resources*, ed pg 26-33, London, Kogan Page.

Weaver, R. R. and Qi, J. (2005), Classroom Organization and Participation: College Students' Perceptions, *The Journal of Higher Education*, Vol. 76, No. 5 (September/October 2005)

Wilson, M. (2004), Teaching, leaming, and millennial students. *New Directions for Student Services*, 106, 59-71. Retrieved July 10, 2011 from http://www.liberty.edu/index. 39