

Project report

An interrogation/investigation of how innovative teaching practices can accommodate & develop the learning styles of students from diverse backgrounds and cultures – to encourage deeper learning and enhance success.

Summary of Project

My TAU project is within a broader context of an existing Scholarship of Teaching and Learning project at Northwest University. In the main project, the researchers are from three different environments within one institution namely, Vaal, Potchefstroom and Mafikeng campuses at the NWU. These campuses have socio-linguistic, socio-economic, socio-historic, as well as socio-cultural diversities and disparities. Yet students' success rates on all three campuses are low. Thus we sought to investigate the various factors that contribute to low student success rates in the various classes. One of the common factors that came through during the exploration phase of the project was the diversity of students learning styles that was never taken into consideration when lecturers designed their instructional approaches. The researchers therefore, sought to apply interactive teaching approaches in their classroom contexts in an attempt to evaluate how or if knowledge of student learning styles and the alignment of teaching approaches may improve acquisition of knowledge at tertiary level. The interactive approach is a student / learner based approach, which allows the students to pace their knowledge acquisition based on the facilitator's innovative teaching approaches. It allows teaching and learning to be an interactive space. This model also allows for blended teaching approaches in the classroom, with a balance of use of technology and traditional teaching methods. This project was ideal for the application of such a model because of the educational and subject focus diversity that exists amongst the students and the researchers involved in the study.

The broader project is a two year project as it is based and informed by Action Research principles of cyclical approaches. Ortun Zuber-Skerritt (2014:3) argues that every Action Research (AR) project should follow a process model. The broader project investigates the various student learning styles that exist in one classroom seating. Exploring the learners' profile and learning style would then inform one Instructional approach. Thus, for my TAU project I specifically focused on evaluating how re-designing one instructional approach to suit the learners can improve and develop the learning experience of students from diverse backgrounds and cultures – to encourage deeper learning and enhance success at NWU. I used a lot of reflective practice in the classroom. I encouraged the learners to reflect on their learning experiences as well as reflected on my own teaching approaches. It was these reflections that informed the implementation of most of the teaching approaches I used throughout the year. Reflection in this context entailed more than intentional thought or conscious consideration about an issue. I also engaged in blended teaching approaches as well as various innovative methods to engage the millennial learners in my classroom. The project yielded successful results with increased student participation, developed student interest in learning and motivated learners to own their learning experiences. It also gave insight to various contributing factors of success in the first year student experience.

Project Implementation

The broader project was carried out in five phases; Phase 1: Exploration, Phase 2: Context analysis; Phase 3: Design of Instructional approach and Phase 4: Implementation and Phase 5: Evaluation. The TAU project focused on only 3 of the five phases, Phase 2: Context analysis, Phase 3: design of Instructional approach and Phase 4 : implementation of the approach.

Phase 2: Context Analysis

North West University is located in the semi-rural town Mafikeng in the North West Province. This means that the student population is very diverse in nature. Thus the student profile survey revealed the following characteristics about my learners:

1. *Millennial generation.*
 2. *They are born into technology and a world of interaction but a few have never been exposed to technology before.*
 3. *They benefit more from a connected Instructional design. This means they need to be known as individuals rather than as a group.*
 4. *My students have a diverse learning context, socially, linguistically, intellectually as well culturally.*
 5. *Academic literacy levels are very low (based on my analysis of the 2016 Test for Academic literacy Levels results).*
 6. **Learning Style Analysis: Classroom profile**
- a. *My class is a very diverse classroom:*

I realised that this year I have all four different learning styles in comparison to the previous 2015 class.

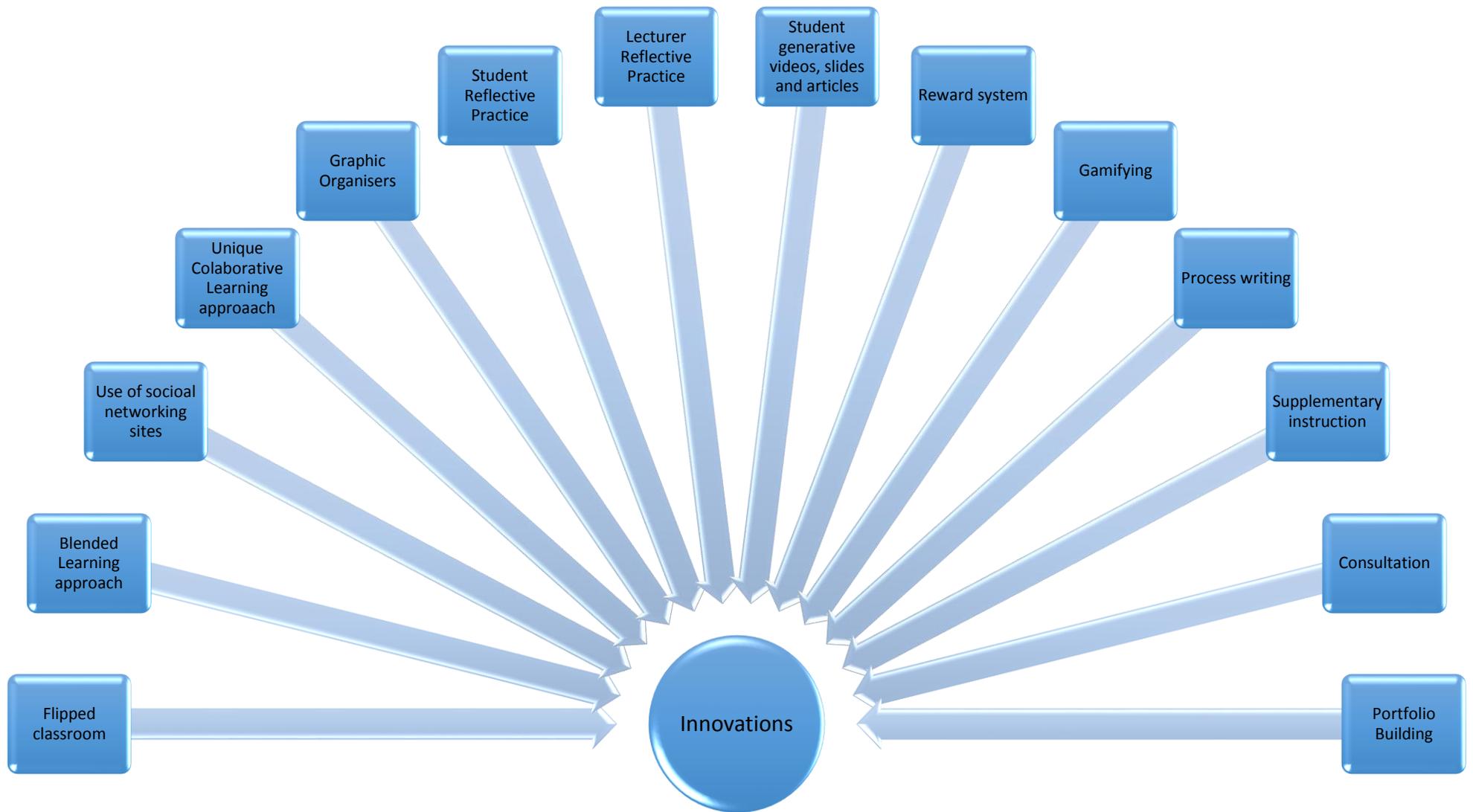
- *Kinesthetic learners*
- *Auditory learners*
- *Visual learners*
- *Tactile Learners*

Thus I had to design a learning lesson which caters for all these four Learning styles.

Phase 3: Design of Instructional Approach

Page 3 shows a diagram which illustrates my Instructional design and Innovations:

I also used Flipped classroom approaches, blended teaching approaches, adapted collaborative learning to suit my classroom context, and used reflective practice as well as graphic organisers to engage my students. I provided my students with PowerPoint slides as well as reading material before and after class as well as during the class to cater for the tactile learner. I used videos and audio material during class contact to cater for the other 3 learning styles. I also designed gamification and gamifying as a motivator for all learning styles.



Phase 4: Implementation of Instructional Approach

Students can become more sophisticated as learners as a consequence of their experience of more open-ended learning environments. Hence the quality of student learning outcomes is affected by students' approach, their approach is affected by their conception of learning, and their conception of learning is in turn affected by their Learning experience. It is in-light of this that I made sure that my assessment methods were aligned with my teaching philosophy as well as learner profile. Because my students are individuals with unique experiences and identities, I made sure they each experienced learning in the best way possible. I designed my instructional approach to cater for the various learning styles. I used group work activities for the participatory learners (Kinesthetic Learner), social media activities for the visual and social learner, theoretical reading notes for the route learner and so forth. I also employ various Classroom assessment techniques that match my teaching. For example there are group assignments, online quizzes for the kinetic learner, class tests for the route learner, oral /viva presentations for the auditory Learners. This means that each learning style was addressed throughout the course of the module as reflected in the narrative below.

Student reflective practice

I encouraged my students to reflect weekly either on video, audio, email or in their reflective journals. It is through journaling their learning experiences that they can review practices that work for them and those that do not. I also used their reflective journals to inform my teaching practice, I took note of what frustrates my students and try to change that as well as try to implement approaches that they request as much as possible. These reflections gave my students a voice, they got the opportunity to design their learning journey at the same time allowing me to be a facilitator. It is through reflective practice that I decentralised the Lecturer as the focus and made the Student the centre of the learning experience.

Students Generated Videos, Slides and articles

My students enjoyed being involved in the learning process. Over the years through research and experience I found that my students tend to remember the practical knowledge creation activities long after they graduate from my course. Students created power point slides on selected topics and gave presentations in class on the concepts. I uploaded their power point slides, videos and articles on the online classroom to allow them to access as well as share information.

Process writing

I used process writing for assignments such as Essays and summary writing. Students are required to apply their research skills in selection of data to support their argument in any argumentative essay while maintaining academic objectivity in their writing. This is a skill that requires a lot of scaffolding. Thus I allowed my students to write through a process. I took them through the structure, step by step giving them room to draft and redraft their thoughts.

Supplementary Instruction

Peer education is important. I have 3 S.I leaders for my students. Unfortunately, student participation was very low. Because the supplementary instruction model is a voluntary model very few of my students attend these sessions.

Consultation

I encouraged my students to come for one on one consultations in my office if they need clarity on any concepts. This year I designed a consultation log book and notified the students of a consultation requirement of 3 at least sessions per semester for each individual. Unfortunately the semester was disrupted and I did not manage to put this into practice as much as I would have liked to.

Conclusion

My students had different reactions to each lesson design. This is because the lessons were always different, they entailed a lot of creativity from both the learner and the lecturer. Their reflections on their experiences as well as analysis of their results will inform me further on how effective this was. At the end of the major project I will make an overall evaluation of the students' learning experience to assess the effectiveness of this design. I am going to compare their reflections (qualitative data) with their Formative and summative marks (quantitative data) to assess if the changed Instructional approach improved the students' learning experience as well as academic success.