A LITTLE BLACK NUMBER: UNDRESSING TRANSFORMATION FROM STUDENT TO PATTERN MAKER

M. Cavanagh
Department of Fashion and Textiles, Faculty of Arts and Design
Durban University of Technology
Durban, South Africa
e-mail: michaellag@dut.ac.za

ABSTRACT

Frequently, there is a gap between students' knowing, being and doing. This is significant in vocations where students must "become" discipline professionals, transforming their identities as they begin to understand the what, how and why of their profession. As learning cannot happen in isolation, it is crucial that staff support this metamorphosis. Tinto argues that the first year is the most important time for this support, when integration into the university is beginning.

This project used action research to facilitate students' journey to becoming pattern makers. Tinto's framework underpinned a scaffolded approach: *Expectations* were clearly stipulated throughout the project: students were to design and construct a pattern for and ultimately sew a little black dress. *Support* was given through lecturer guidance, consultations and tutor assistance. *Feedback* was given weekly in time for students to correct work before beginning the next step. In a practical project it is inevitable that students are *involved* in the learning process. In the case of this project, they needed to use pattern making to link Creative Design and Garment Technology together. A focus group was conducted with students to understand if and how they experienced the transformation of becoming.

By creating clear expectations, support, timely feedback and involvement, it was possible to facilitate the transformation less painfully than previous years. The implication for student well-being in higher education is that students who feel supported are more likely to succeed. This project is still challenging for students as it allows them to rise to higher expectations.

Keywords: vocational education, support, being-becoming, assessment

CONTEXT

Merely obtaining knowledge and skills is not enough to transform a student into a professional; a student must develop the "ways of being" of the profession in order to become (Dall'Alba 2009). In the case of a course in fashion design these "ways of being" encapsulate the intrinsic process of thinking, acting and being a fashion designer, as students begin to understand the how and why of their profession (Christie et al. 2007). This means that although students may theoretically know the rules of their disciplines (the "what" of the profession), they may show a shallow understanding of the discipline if they are not able to apply this knowledge to different

situations (ways of acting and being). When studying to become fashion designers, students must learn more than the rules to be successful professionals. They need to be able to solve real world problems using discipline knowledge "applied in practice contexts within and beyond the educational program" (Dall'Alba 2009, 34).

Traditional training for professional disciplines tends to focus on knowledge and skill acquisition (Dall'Alba 2009), but often fails to make connections for students about why these rules exist. This leads to students who can replicate the examples taught to them in class, but who struggle when tasked with applying that knowledge to a different situation. Gee (2008) argues that knowledge is not something that can simply be transferred from teacher to student. This is echoed by Stetsenko (2010, 6), who states that the traditional view of "orthodox cognitivism" is deficient in that it sees students as passive consumers of knowledge, empty vessels for teachers to fill with information. This "empty vessel" view removes knowledge from its context, preventing students from actively exploring information to create their own personalized connections to knowledge, which would make room for professional becoming.

Dall'Alba (2009, 42) argues that "professional education can no longer stop short after developing knowledge and skills". We need to prepare students for a "changing world" (Barnett and Coate 2005). Because fashion is in a constant state of flux, where things go in and out of fashion constantly, it is not possible to predict what students need to know to be successful after graduation. Furthermore, designers need to be able to adapt to the new trends throughout their careers. I argue that in order to promote student success and well-being in higher education, we need to focus on preparing students for this unknowable future by supporting them in become these discipline professionals. In this way, it is more important for students to master the whys of the profession so that they are able to apply it to different contexts.

In this process of becoming a pattern maker, students begin to understand the hows and more importantly the whys of pattern making (Christie et al. 2007). Students begin to transform their identity from that of student, becoming a pattern maker. Mezirow's (2006) theory of transformative learning recognizes distinct stages people experience as they learn, and this aligns to the concept of "becoming". The experience of being and becoming is often painful and is tied to issues of identity as people must shift their own concepts of "self" to accommodate the new "ways of being." In this way, education transcends the bounds of "knowledge for the sake of knowing" to the development of individual identity (Stetsenko 2010).

Dall'Alba (2009, 42) argues that one cannot become a professional isolated from the social context, and professions "cannot exist without individual professionals." The influence of culture and community cannot and should not be ignored, as these can be tools that help students contextualize and engage with knowledge on new and deeper levels, aiding their becoming.

Stetsenko's (2010, 7) view that learning and development are shaped by culture supports this concept, where "social practices are viewed as producing not only knowledge but also identities." As Christie et al. (2007) posit, "learning does not take place within the realm of individual cognition" but rather is a social phenomenon.

Tinto (2006) argues that universities need to become involved and support students in this process of becoming, most substantially at a first-year level where the gap between high school and Higher Education is vast. "We learned that involvement matters and that it matters most during the critical first year" (Tinto 2006, 3). Tinto goes on to explain that involvement and engagement are linked concepts, which refer to "behavioral interactions" that form academic and social relationships between students and staff. This involvement is crucial as it forms the foundation on which students begin to build links to their new identities within their chosen disciplines. In this way, it is crucial for first year lecturers to support the early phases of student becoming.

If students are better supported in the early stages of their becoming, they are better equipped to handle the process of transformation in later years as a solid foundation has been laid. Speaking to the context of Higher Education in South Africa, many students come from high school un and under-prepared for the demands of tertiary education. Massification of Higher Education in South Africa means that a more diverse range of students are able to access to universities (Scott, Yeld and Hendry 2007). More students who were previously disadvantaged are able to enter the doors of the universities. However, getting in the door is not enough, and this improved access is not currently translating to improved throughput rates (Lewin and Mawoyo 2014; Manik 2015). Tinto (2006) speaks about the Revolving Door phenomenon, where students are able to get into university but struggle once there and frequently drop out. This is supported by Scott et al.'s (2007) report, where throughput patterns do not differ significantly in terms of race to pre-democracy rates despite an increase in African student enrollment. In order to prevent this, the way that these students are supported needs to be more intentional to redress the inequality of the past.

However, dropping the standard of Higher Education to make it "easier" for students to pass does not help the students or the country in the long run. With the high rates of unemployment in South Africa, the primary mandate of universities is to produce employable graduates who are able to think critically and independently. Further, more entrepreneurial professionals who are able to go out into the world and start their own businesses.

PURPOSE AND RESEARCH QUESTIONS

Throughout my teaching career, I have noticed that although students understand the "rules" of

pattern making they are not able to understand why these rules need to be followed. Despite each lecture explaining why they were required to do specific things, without them actually making the patterns into garments, they often did not fully grasp the reasoning. It was only when students completed more authentic assessments that were better integrated with other subjects that they were able to see for themselves why these rules are needed. Until students actively put this knowledge to use, it remains abstracted and easy to forget.

In the Department of Fashion and Textiles at the X University of Technology, an integrated project called the Little Black Dress (LBD) has been run for many years towards the end of the first semester in first year. Students are asked to design a dress that has specific requirements (such as the dress being sleeveless, needing a zip opening and a facing), then use that design to make a pattern and then use the pattern to cut and sew the final garment. Initially, it began as an "exam style" project, where students were not allowed to ask questions or get help. This was found to be ineffective, as students did not seem to have adequate knowledge to be able to complete the project to a high enough standard.

The project was then run as a class assessment, where students completed work under lecturer guidance. However, there still seemed to be a gap between what students knew and what they were able to do. Students were making costly mistakes as they failed to think about the design from not only a design perspective, but also considering the practicalities of making a pattern and sewing the final garment. Again, results were lacking.

As a lecturer, I wanted to examine what was missing in this project and why students were not yet able to think like pattern makers. Making use of an action research reflection cycle, I set out to investigate how students are becoming pattern makers and how this becoming could be supported. The research questions were therefore:

1.   How do first year students experience the transformation from student to pattern maker?
2.   In what ways can I as a lecturer support this transformation?

METHODOLOGY AND APPROACH

The research follows a qualitative approach, as this type of research places more importance on the "why" of situations (Maree 2007, 51). This is appropriate to the research topic, as the primary question is how students experience the transformation from student to pattern maker. Furthermore, Creswell (2003, 182) explains that qualitative research is more suited to including participants' realities. This is further supported by Denzin and Lincoln, (2011, 8) who posit the "socially constructed nature" of qualitative research. I follow on from Christie et al. (2007, 574) who believe that learning is a "co-constituted" experience by including my students in the

research in order to learn from and with them. I do this through a focus group with students to hear from them in their own words how they have experienced the learning.

I operate from a constructivist paradigm, believing that reality is socially negotiated and constituted (Creswell 2003, 8), and this world view suits the exploration of the concepts of being and becoming in a social context. The paradigm of constructivism concerns itself with the lived experiences of people, acknowledging that each participant brings his or her own "truth" to the research and yet makes allowance for these multiple perspectives to be reflected (Creswell 2003; MacKenzie and Knipe 2006). These truths are nuanced and complex, filtered through each person's socio-cultural experiences (Creswell 2003). As the researcher, I am the living instrument of interpretation, and I attempt to learn from these multiple realities in order to ultimately construct my own conclusions (Maree 2007, 34).

Using action research as my research methodology allows me to reflect on my own practice with intentionality, by following the steps outlined by Coats (2005, 5). These steps spiral repeatedly in cycles, following the stages of planning, action, observation and reflection. The cycles continue until a solution has been found. Using action research allows me to improve my practice as a lecturer with evidence-based changes. This is due to the reflexive nature integral to the methodology.

I used a cyclic approach to iteratively improve the pedagogical procedure within the LBD assessment. The cycles are summarized as follows and will be elaborated on within this article:

Starting point – Reflected with colleagues on the initial LBD assessment.

Cycle 1 – Restructured the assessment as a class project.

Cycle 2 – Implemented authentic learning theory in assessment design.

Cycle 3 – Restructured assessment to include Tinto's scaffolded approach.

Cycle 4 – Conducted a focus group with students to hear first hand how they had experienced the learning within the LBD assessment.

Each cycle was followed by a process of observation, reflection and planning to improve the assessment design for the next cycle.

A focus group was used because the dialogical nature encouraged open discussion, allowing the multiple truths of participants to be fully probed (Silverman 2015, 526). Onwuegbuzie and Collins (2007, 289) recommend focus groups be kept to 6–12 participants in order to remain practicable but still allow for a variety of voices to be heard.

Students in their first year at XUT were asked to participate in the focus group, and those who volunteered formed the participants. The focus group consisted of seven students towards

the end of their first year. Students were asked to participate because they were involved in the project directly and I wanted to understand how they had experienced the new assessment design. As a lecturer, I cannot presume to know what my students experienced, I could only see the results in their work. By engaging them in a focus group, they were able to speak openly about their experiences and this gave me a richer understanding of how the intervention had affected their learning. As students were asked to volunteer, the focus group can be said to use non-probability sampling as there was no statistical representation among the participants.

At every stage, it is important to ensure research is approached ethically (Creswell 2003; Denzin and Lincoln 2011; Goldbart and Hustler 2005). To this end, all participants signed an informed consent document, wherein the nature and purpose of the research was explained to them. Participants were further given the option to withdraw from the study at any point without any negative consequences to themselves. The focus group session was audio recorded with participants' consent and they were ensured that all data would be anonymized.

THEORY

I have written in depth about the importance of students becoming, and this concept underpins all aspects of the research. In order to better understand how to create situations where students were able to contextualize knowledge and use it in diverse ways, I drew on Reeves, Herrington and Oliver's (2002) characteristics of authentic learning.

Herrington, Oliver and Reeves (2010) discuss contextualized and decontextualized knowledge, arguing that decontextualized knowledge is stored as "facts" rather than "tools". This separation of knowledge and context leads to shallow understanding, where students see information as a "product" that they passively consume. Instead, Herrington et al. (2010) reason for authentic assessment design that helps students to contextualize knowledge, making this knowledge more easily retrievable for students to use as tools. The notion of decontextualized knowledge is congruent with Dall'Alba's argument that knowledge and skills are not enough to transform students into discipline professionals.

In order to become pattern makers, students need to authentically learn and understand the discipline knowledge so that they are able to apply it in a multitude of different situations independently. Using Reeves, Herrington and Oliver's (2002) framework, I attempted to redesign the LBD project to be more authentic. They maintain that authentic learning is characterized by the following:

- Tasks that have real-world relevance
- Multiple perspectives

- Multiple possible outcomes

- Ill-defined, complex and sustained tasks

- Collaborative

- Value laden

- Interdisciplinary

- Authentically assessed

- Culminate in authentic products

This means that students are not just able to use the knowledge to replicate what they were taught in class, but to understand how this knowledge applies to other situations.

Starting point

In discussion with colleagues, we had agreed that running the LBD project under exam conditions was not resulting in students understanding the links not only between the subjects integrated into the assessment design (Creative Design, Pattern Technology and Garment Technology), but also between the theoretical knowledge and its practical application. Students seemed to be unable to contextualize what they had learnt in previous classes and apply it to this project. We agreed to run the assessment during normal lectures as a class project instead of as an "exam style" control.

Cycle 1

The LBD was run as a class project, where the lecturers were available in class to help students complete first the design, then pattern and finally sew the garment. I found in the pattern making section of the project, students were not able to make the connections between what they had designed and how to make the pattern for it. Students frequently did not consider the pattern process within the designs and came to class with unfeasible designs. Many students had not considered how one would get into the garment, how they would achieve the correct fit in the fabric allocated or how they would physically sew the pattern once made. Observation of students' final patterns and garments still showed a lack of student transformation – they were still not able to use what they had been taught in the ways of a pattern maker. Many students spent time in the patterns classes correcting issues with the design or time in the garments classes correcting the pattern.

Cycle 2

This led me to the second action research cycle, where I followed Reeves et al.'s (2002) concept

of authentic learning. Although many authentic learning characteristics were already present in Cycle 1, such as real world relevance (as this was a taste of the fashion design process in the world of work), multiple outcomes (in that students could approach the project in a variety of ways to achieve a correct solution), ill-defined, complex and sustained (due to the integrated approach, students needed to work through the complexities of each design from the point of view of all subjects, and continue working in a sustained manner over many weeks as they completed the task for each subject, leading into the next step), value laden (because students were able to design something original of their own choosing, which they found more exciting) and finally culminating in an authentic product (on completion students had created a final dress which they had designed, patterned and sewn themselves). However, something was missing, and students were still not learning authentically.

At this stage, I reflected that the pattern making section was not being authentically assessed because students did not see the value of completing each weekly task, despite these tasks leading on from one another. Biggs' (2014) constructive alignment proved helpful in solving this lack of authenticity, in that it requires assessments to home in on not only what students were required to *know* but also what they should be able to *do*. He calls for us to "focus on what outcomes students are meant to achieve and help them to do so" (Biggs 2014, 7). This concept helped me to focus on assessing in an authentic manner, congruent with Reeves et al.'s (2002) framework. The planning stage of this action research cycle involved further breaking up the pattern process into weekly tasks with the end goal of each for students to master that stage of the pattern making process. Feedback was more structured and intentional each week, aiming to give feedback in time for students to make changes (Biggs 2014). This focus on supporting students to achieve the intended outcomes helped me to begin answering the second research question, "in what ways can I as a lecturer support this transformation".

The process described above was implemented with students, and the results were an improvement in student performance from previous years. However, students were still struggling to make the connection between the how and the why of pattern making. Although students were getting feedback in time to make corrections before beginning the next stage, they were not always making the right changes. Many students still struggled to understand exactly why they were having issues with either the pattern or the garment.

Because an authentic assessment is designed to have flow, where each task leads into the next, students who do not complete one task effectively have major issues in executing the subsequent task. Students not fully grasping all aspects of one task impacted on the ensuing tasks as students spent longer grappling with problems that were supposed to be fixed in the previous task. This severely disadvantaged students.

Cycle 3

At this point, Cycle 3 reflected on how better to help students complete the pattern making tasks of the LBD, focusing on Biggs' (2014) notion that teachers should create environments that support students in their learning. Again, I attempted to answer the research question of how I as a lecturer could support my students in their becoming. In this, I found help in Tinto's (2012) framework that outlined four aspects to help students through their journey in becoming pattern makers. These aspects were: Expectations, Feedback, Support and Involvement. Together, these aspects form a framework designed to help scaffold student learning through the processes of transformation and becoming.

Interestingly, on reflection I saw that all four of these concepts were already incorporated into the Cycle 2 version of the LBD project:

Expectations – a brief was given to students which stipulated what they were required to design, and how they were expected to make an accurate pattern that they would use to cut and sew the garment. The final sewn dress needed to faithfully replicate their original design.

Feedback – students were given weekly feedback in the form of copious written comments and corrections, and they were able to consult with lecturers during class times. This was more immediate as it was weekly, and in time to make changes.

Support – students completed the work in class under lecturer supervision and consulted individually with lecturers throughout.

Involvement – Students had agency within this project as they were able to design, make the pattern and sew the dress themselves.

However, the project still wasn't working. Something still wasn't "clicking" for students, and they were not able to transition from students to novice pattern makers. Reflecting on this, I redesigned the project again, this time with more intentionality. At every step, I attempted to be more overt about the processes and requirements for students. Often as academics it is easy to forget how much knowledge we assume that our students will know.

For this iteration of this project, *Expectations* were explained more overtly. I broke the project up into weekly tasks and described what the expectation for each task was. Instead of briefing the students only once at the beginning of the project I would remind students frequently at the start and end of each lesson what was expected from them, what they needed to achieve and what the next step was going to be. I tried to make the expectations as clear and categoric for each of the tasks as possible.

Feedback – previously feedback was given weekly in the form of written comments and corrections on students' work. Each task was handed in by the end of class or a specific

deadline. These tasks were marked and corrected each week before the next lesson, so that when students came into class, the feedback was waiting for them. They would collect their work and read over the comments. They were given the opportunity to discuss these comments in class with the lecturer. These individual consultations gave students the opportunity to engage in a dialogue with the lecturer, discussing where they didn't agree or understand. These discussions were especially helpful in a practical subject like pattern making, where there is often more than one correct solution. These conversations were also helpful in teaching students the why of pattern making, as I was able to ensure that they were understanding how these mistakes would affect the final outcome of the garment.

In Cycle 2 of the project, the issue had been that students were left to interpret these comments outside of class time. Although feedback was structured in alignment with the ideas of Tinto and Biggs discussed above, there were still problems where students were choosing not to complete corrections or misunderstanding how to correct work when completing on their own. This is where Support became an important intervention.

For this version of the project the most dramatic change was in the way that *Support* was structured. Traditionally, students were able to consult with the lecturer in class while they were working. However, in a class of between 25–30 students, that practically speaking, each student was only getting a small amount of time. Furthermore, each lesson was only 4 hours, which for practical work was not much time. Any work that was not completed in class time was given as homework for students to complete on their own. In the past this is where many of the issues came up. Although each student was given copious amounts of feedback through written comments and corrections on their work, once they were on their own, they would sometimes become confused or get "stuck". During class time, students were able to consult with the lecture to clear up confusion or ask questions. But once they were on their own, they would either have to grapple with these issues alone or would ask their peers. Asking peers often led to more confusion or incorrect work.

It is well documented that students learn socially (Christie et al. 2007). It is impossible to separate learning from the social situation, and thus intervention was needed to make sure that students had access to the right kind of help at the time that they needed it. Due to the curriculum requirements, it was not feasible to extend the project to allow students to complete all work in class. Instead, we employed Tutor Mentor Assistants (TMAs) to aid. Students were not allowed to take the work home, but instead, structured tutorial sessions, in addition to the four-hour lecture time, were arranged where students would be given the opportunity to complete their work with assistance from tutors. This helped in a multitude of ways – first it allowed students to work in dedicated labs which have specialized pattern making tables. Many students are in

residences or small apartments or rooms and do not have the space or facilities to work with the large scale (A0 sized or larger) patterns comfortably. Secondly, it meant that students had a dedicated time to complete their work which prevented them from leaving their homework for the last-minute, leading to rushed work and sloppy results with a multitude of preventable mistakes. And most importantly, the presence of qualified fashion graduate TMAs who had gone through the same process of becoming meant that students were getting the right kind of help. Further to this, the tutors were able to act as intermediaries, who were closer to peers than lecturers. Students did not have to feel embarrassed to ask "silly" questions when they were not sure of something. The tutor-to-student ratio was also much lower than lecturer-to-student (1:10–15 instead of 1:25–30), so students could get more focused help more often. This allowed students to be more intentional about their work, while helping them to feel supported. They were not alone in this journey, they were assisted at every turn by the lecturer or tutors.

Lastly, Tinto (2012) recommends *Involvement* throughout assessments. Tinto links involvement to engagement, and states that students who are actively engaged with learning do better. This is echoed by other authors such as Christie et al. (2007) and Lewin and Mawoyo (2014, 6). In this project, involvement is inherent because students are not only creating their own individual designs, but they are also making their own patterns which they use to sew the final garment. They had agency in that they chose each aspect of the design and approach. This made the project more interesting to them, because they were able to design a little black dress that they liked aesthetically and that they felt was appropriate to their abilities. Throughout the process, students were advised to make sure they designed while thinking about the pattern and sewing and to work within their strengths. For example, a student who was uncomfortable with sewing was encouraged to design a dress that was easier to sew but had interesting design or pattern features.

The design of the project also incorporated a degree of difficulty for the pattern and garment components, so students who chose to attempt more intricate designs were rewarded even if they had a harder time executing the design practically. This also meant that it was more difficult for students who chose "easy" designs to achieve very high marks (although a simple design executed very well could potentially result in a distinction). This created a sense of challenge, as students had to decide for themselves how much they wanted to push the boundaries of their abilities.

In consultation with the Garment Technology lecturer, we also decided to be more intentional about getting students to make the necessary corrections in time. In previous years, some students chose not to make the final corrections to their pattern, thinking that it was not that important. This led to issues snowballing on students, as they lost time trying to correct

their patterns during garment lectures. Frequently, students would end up needing to make these corrections anyway, but now had to recut fabric with the correct pattern. Alternatively, they had issues with the sewing as the pattern pieces did not match or work out as they expected. In order to "force" students to make these corrections in time to prevent issues, students were required to have their patterns signed off by the patterns lecturer. If corrections had not been made to the pattern lecturer's satisfaction, the garment lecturer would not give the student fabric to make their dress. Students were warned about this well in advance, and this system showed students the perils for not completing corrections. This new system helped prevent many issues in the garment making process.

Cycle 4

When students completed the project, overall, the quality of both the patterns and the garments were better. There were fewer issues in the sewing process as students had been forced to correct and learn from their mistakes in time for it to make a difference to the next stage. The translation from design to pattern to final garment was smoother than it had been in previous years.

This cycle was used to "close" the action research spiral. The first research question in this study asked, "How do first year students experience the transformation from student to pattern maker?" In order to understand how the students had experienced the process, a focus group was conducted with several students in order to hear directly from them. This was conducted towards the end of their first year in order to allow them to reflect on how the LBD project had impacted their journey in becoming pattern makers. I needed to hear how students had experienced the LBD project in its latest form closing the action research loop in order to know if I had really found a "solution". Asking students directly about their experiences also helped me to understand whether the interventions I had attempted were effective in supporting their learning and becoming.

Students spoke about the difference between this project and others that they had completed in class during the semester. They mentioned that normally in Garment Technology, they are given a pattern to sew with all the correct markings and information. They discussed how they had taken this for granted. When they had to sew up a pattern of their own making, these details became important make or break aspects, resulting in more or less successful end products.

> "You kind of figure out the full translation. So, it was the first time where you kind of see what you do in patterns and why actually you are doing it. So, you get told all of these rules and everything and it can kind of go over your head if you're not really sure why or you don't really see how it will come out in real life. So, I think it was the first time where we see it come to life. And we kind of see what all the planning comes to." Participant 3.

The above statement exemplifies how students go through the process of becoming, as they begin to understand the why of pattern making.

Students said that they had found the LBD very hard, with some mentioning that they had not thought about how they would construct the pattern or garment during the design phase and that this had caused issues in later stages. Many of the students said that they had found it difficult initially, but as they went through the project it became easier. Some commented that as they went into the pattern making process they began to understand more about the design. Likewise, as they completed the sewing, they gained a better understanding of the pattern, explaining that the whys of pattern making started to make more sense when actually sewing. This seemed to be a common viewpoint, with many students discussing how it got better or easier as they went through the process. Through this project, students were beginning to transition into pattern makers with more than just knowledge and skills, but the ability to apply this in other contexts (Dall'Alba 2009). Students begin to lay the foundations on which their pattern maker identity is build, in a supportive, structured environment.

One student disagreed, stating that even though she got feedback on her pattern, she still did not know what she was doing. Another student used the word "daunting" to describe the process, explaining that he was "basically hoping the whole time". However, he went on to say that by the end of the sewing process, everything made sense and "fitted together" for him. One student spoke about how even though they initially did not know what to do, they were able to get help from the tutors and were able to "learn along the way". A student spoke about how she had been too "scared" to try a more complex design but regretted not challenging herself by the end of the project. This was contrasted to other students who felt they had made things too complex for their abilities – running out of time in the garment section or having to struggle through the pattern making. Many of them also discussed the impact the LBD project had on their subsequent projects.

After the LBD, students completed a practical exam style project which we call the "Swop Swop Control". Under exam conditions, students were not given any help from lecturers nor were they allowed to ask their peers or tutors. They were asked to create a technical drawing that represented a given sample garment. These technical drawings were then "swopped" and each student received another student's drawing of a garment without being able to see the original sample. They were then asked to make a pattern from this drawing. Once again, students' work was swopped, and they then used each other's pattern to cut and sew a garment. Students only saw the initial garment when creating the technical drawing, and each subsequent task asked them to only use the information provided by the other students' work. This exercise

helped to cement the whys of fashion design – why is it important to include specific information on a technical drawing, why is it important to have specific features on a pattern, etc. They were able to see what happens when the rules aren't followed, and in this way learn from each other's mistakes in a very concrete way. They were able to link the design to the pattern and to the garment better, so they saw how these mistakes were compounded through the processes.

Another integrated assessment is the XUT "Project Runway". Again, this assessment is conducted under exam conditions, where students are not given help. They were asked to design and create a blouse, following the stages from drawing to pattern to garment.

It should be noted that these "exam style" assessments happened as integrated projects near the end of each term within the first year. Between these projects, normal unintegrated assessments continued, and students were given help and support from the lecturers for these.

I asked students to compare the way that they had done Project Runway (with no help) and the LBD (with help at every stage). One student explained that reflecting on Project Runway made them value how much help they had actually gotten during LBD, whereas at the time of LBD they felt they were not being helped very much and were being constrained. They mentioned that other students had complained about how the garment lecturer had told them they needed to sew things in a particular way and order, but the students wanted to do it in their own ways. However, one student reflected after Project Runway, that she saw how much help they had been given. The freedom they had in choosing how to sew the garment sometimes led them to have serious issues that required redoing large sections to correct mistakes. They now saw why the lecturer had told them to approach their LBD in a certain way, but at the time they did not yet understand the implications of a different order or method of construction.

The focus group also asked if students felt that pattern making had "clicked" for them, and if so, at which point did this "click" happen. The purpose of this interview question was to answer the research question of how students experienced becoming a pattern maker. Interestingly, students had different answers. Some felt that the subject began to make sense during the LBD, using the scaffolded approach. Some students felt that it was only during the Swop Swop control when they were able to see the effect of each subject clearly that pattern making start to make sense. Others still felt that it was only in the Project Runway assessment that they truly understood pattern making. This is interesting to observe as it shows how students learn at different paces through different experiences. All of the students were reluctant to say that it had completely "clicked" but acknowledged that they had a much better understanding compared to the beginning of the year. Further, they acknowledged that they were only in their first year, and still had another two years to complete. They felt it would get

easier as time went on. One student said, "I feel like a year is a lot, but I feel like I still need to learn a lot from it." However, she reiterated how through every project and every mistake, she was learning.

On speaking about the mistakes they had made and struggles they had had, one student said, "I think you have to have these moments. It's like a learning experience." Another mentioned that "I only recognize fully what I've learnt [later], like get a full perspective afterwards." Students spoke animatedly about how much they had learnt, as now when they go shopping and are able to see how the garments are constructed, some of them think to themselves "Oh, I can make that now!"

I concluded by asking students if they felt like they were pattern makers. Intriguingly, students initially said no, maybe a little or not really. Some said they felt that they were maybe a quarter of the way there. One said she felt that she would, in time, feel like a pattern maker.

I summarized what they had learnt during the year, listing the modules and projects we had covered. I then asked them if, considering that, they felt like they were pattern makers. This time, students stopped to contemplate and answered that in comparison to where they had started, they now understood a lot. They said yes, a little bit, a lot more, they felt more like pattern makers. They were able to recognize the transition that they had made in becoming pattern makers throughout their first year.

This I find very interesting, because students often do not realize how much they had learnt until we ask them to take the time out to reflect on what they have achieved. This reflexivity is a very important aspect of practical learning.

Students also commented on how strict they thought the lecturers were in the beginning, where if their pattern was a few millimeters off it was marked incorrect. With the experience they now had, they could see how much of a difference those few millimeters made to the final garment. They were able to see why particular pattern making rules existed and why and how they affected the final garment.

One student mentioned that "you find the mistakes from your pattern in your garment." This shows how students had developed the ability to see the impact of one subject on another, better articulating and understanding the process of a fashion designer.

> "I feel like patterns is the core thing that makes or breaks the outfit. If your pattern is wrong ... you are screwed." Participant 5.

IMPLICATIONS

To conclude, I would argue that this project worked because there was more intentionality in

each aspect. Even though in previous years, all aspects of Tinto's framework were present, it was only when an intentional approach was followed with the purpose of making explicit the core concepts and mastery of skills were we able to get better results. The challenge in this type of teaching is that it is not enough to design more authentic assessments, and it is not enough to support students. It is imperative that we make sure that the assessments are designed in such a way that the support is inherent and that students are aware of what they are doing. On reflection, the initial cycles of this project focused on what literature advised to help students in the process of becoming. I attempted to focus on designing assessments to align to outcomes (Biggs 2014), aiming to teach and assess more authentically (Herrington et al. 2010). However, these concepts and frameworks were not enough to help my students in becoming pattern makers. The context knowledge they had learnt was still decontextualized (Stetsenko 2010), and students had not adapted this knowledge as "tools" for the discipline (Dall'Alba 2009; Herrington et al. 2010).

I argue that it was only when these elements of good pedagogical practice were combined with the very intentional design of support that students experienced a shift in identity. Christie et al. (2007) focus on the social practices within any discipline as extremely influential but often neglected aspects. They go on to state that "Being and becoming a successful learner is as much about the social and emotional, as well as the cognitive, dimensions of learning" (Christie et al. 2007, 580). I believe that in Cycle 3, I focused on supportive structures, taking a scaffolded approach to teaching and learning, and by doing so, I was more aware of the learners' social and emotional needs. Students were not left to grapple by themselves, they had weekly consultations with the lecturer and where given guidance and assistance from qualified tutors when work was not completed in class. Feedback in this case was dialogical, where students were able to engage in a conversation with the lecturer (not a one-way dictation). This meant that they were always supported socially as they were learning and becoming, and this was what appeared to be the missing element in their becoming.

Furthermore, even though tasks are designed so that students are well supported, the tasks still need to be challenging for students. One student mentioned that exam condition projects were a true test of their abilities. If they designed something that was too easy, they would finish it and think that they could have done more and learnt more. However, if they designed something too complex, they were able to reflect and see that they needed to simplify the design to better fit with their unique abilities. The importance of having high expectations of students cannot be underestimated (Tinto 2006, 54). The undertaking is to design assessments that are not only challenging, but also grasp the interest of students, give them room to explore multiple correct solutions, learn from and correct their mistakes in time to fix them, and have timeous

and dialogical feedback. We also need to make sure that these projects allow students the room to begin to develop their identities as discipline professionals. It is imperative that we embed the support academically, emotionally and socially that they need to explore their identity more fully within the assessment design. If we can do that, then we are able to better support diverse students in the process of becoming pattern makers.

Although this study speaks directly to students becoming pattern makers, I believe that it has greater application within higher education more broadly. Generally, students go to university to learn a vocation, profession or set of skills that will allow them to become participants in the world of work. Thus, students, regardless of their discipline, are in some way becoming and it is our responsibility as staff to support this transition as much as we can. The tendency to focus on support for academic learning is insufficient to understand the emotional, social and academic needs of students. Tinto (2006) argues that the classroom is possibly the only place where students meet other students and staff. Further, he contends that, "if involvement does not occur there, it is unlikely to occur elsewhere" (Tinto 2006, 7).

REFERENCES

Barnett, Ronald and Kelly Coate. 2005. *Engaging the curriculum*. UK: McGraw-Hill Education.

Biggs, John. 2014. Constructive alignment in university teaching. *HERDSA Review of Higher Education* 1(1): 5–22.

Christie, Hazel, Lyn Tett, Vivienne E. Cree, Jenny Hounsell and Velda McCune. 2007. "A real rollercoaster of confidence and emotions": Learning to be a university student. *Studies in Higher Education* 33(5): 567–581.

Coats, Maggie. 2005. *Action research: A guide for associate lecturers*. UK: The Open University.

Creswell, John W. 2003. *Qualitative, quantitative, and mixed methods approach*. California: Sage Publications.

Dall'Alba, Gloria. 2009. Learning professional ways of being: Ambiguities of becoming. *Educational Philosophy and Theory* 41(1): 34–45.

Denzin, Norman K. and Yvonna S. Lincoln. (Eds.). 2011. *The Sage handbook of qualitative research*. 4th Edition. California: Sage Publications.

Gee, J. 2008. *Social linguistics and literacies: Ideology in discourses*. Routledge.

Goldbart, Juliet and David Hustler. 2005. Ethnography. In *Research methods in the social sciences*, ed. Bridget Somekh and Cathy Lewin, 16–23. London: Sage Publications.

Herrington, Jan, Thomas C. Reeves and Ron Oliver. 2010. *A guide to authentic e-learning*. London and New York: Routledge.

Lewin, Thandi and Monica Mawoyo. 2014. *Student access and success: Issues and interventions in South African universities*. Inyathelo.

Mackenzie, Noella and Sally Knipe. 2006. Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research* 16(2): 193–205.

Manik, Sadhana. 2015. Calibrating the barometer: Student access and success in South African public higher education institutions. *Alternation* Special Edition 17: 226–244.

Maree, Kobus. 2007. *First steps in research*. Pretoria: Van Schaik Publishers.

Mezirow, Jack. 2006. Transformative learning theory. In *Lifelong learning: Concepts and contexts*, 114–128. Routledge

Onwuegbuzie, Anthony J. and Kathleen M. T. Collins. 2007. A typology of mixed methods sampling designs in social science research. *The Qualitative Report* 12(2): 281–316.

Reeves, Thomas C., Jan Herrington and Ron Oliver. 2002. "Authentic activity as a model for web-based learning." Annual Meeting of the American Educational Research Association, New Orleans, LA, USA.

Scott, Ian, Nanette Yeld and Jane Hendry. (Eds.). 2007. *Higher education monitor: A case for improving teaching and learning in South African higher education.* Pretoria: Council on Higher Education.

Silverman, David. 2015. *Interpreting qualitative data*. 5th Edition. London: Sage Publications

Stetsenko, Anna. 2010. Teaching–learning and development as activist projects of historical becoming: Expanding Vygotsky's approach to pedagogy. *Pedagogies: An International Journal* 5(1): 6–16.

Tinto, Vincent. 2006. Research and practice of student retention: What next? *Journal of College Student Retention: Research, Theory & Practice* 8(1): 1–19.

Tinto, Vincent. 2012. *Completing college: Rethinking institutional action*. University of Chicago Press.