

COLLABORATIVE LEARNER BIOGRAPHIES: OR, DISCOVERING YOU HAD CREATED A PROJECT-BASED LEARNING TASK WITHOUT REALIZING IT

David Saltmarsh
Macquarie University, NSW Australia

Abstract

The purpose of this paper is to report on an assessment task designed to provoke pre-service teacher education students to recollect and share experiences of what enabled and frustrated their learning. The assumption underpinning the creation of this task was that: if teacher education students could, through reflection and discussion, recapture the excitement and satisfaction gained through realizing they had understood an idea or mastered a skill, they could focus on promoting that sense of discovery or achievement in their students. Conversely, if they recalled what had inhibited their learning, and became aware of what inhibited the learning of others, they could avoid repeating this with their students. Twenty-nine students consented to having their submissions used for this research and the work of two groups is analyzed and reported here. Students' contributions commented on the facilitators and inhibitors, as expected, and often noted the details of their collaborators' learning experiences with some surprise. It was as though they had not expected to discover that others too had been humiliated or unfairly disciplined and the exercise led to a greater sense of a shared learning experience. Comments about the nature of the task and the value of reflection were also made.

Introduction

Student engagement, the sense of belonging and participation in school, is considered to be a predictor of academic achievement when it is high and an indicator of the likelihood a student will drop out when it is low (Willms, 2003). It is not surprising then that there is international interest in how student engagement is fostered. The capacity to engage students, therefore, must also be considered an important element in programs of teacher preparation. However, this raises another contentious issue: that of the quality of university and teacher education programs.

Research by Arum and Roksa (2011) has shown that college students in the USA spend far less time in study and study related activities now than they did 50 years ago, and are far less willing to tackle intellectually demanding tasks (e.g. preferring to ask someone what the book or article was about rather than read it themselves). However, this problem is not entirely one of students making as the actions of academics who demand less of students (less reading, shorter essays, making less marking to do) contributes to and entrenches the problem. Whatever the cause, for people who wish to qualify as schoolteachers this situation has significant consequences. Teachers who have not developed good academic skills themselves can hardly be expected to inspire others to develop them. If, as the American Association of Colleges for Teacher Education and Partnership for 21st Century Skills (AACTE & P21, 2010) have argued, it is essential that students develop the skills of critical thinking, communication, collaboration and creativity, then it is essential that students develop these academic skills. The Australian government's Department of Education, Employment and Workplace Relations (DEEWR) has also asserted that in education "the priority is moving towards higher-order skills that assist individuals to be more flexible, adaptable, creative, innovative and productive" (Ithica Group, 2012, p. 10).

The purpose of this paper is to report on an assessment task designed to provoke pre-service teacher education students to recollect and share experiences of what enabled and frustrated their learning. The assumption underpinning the creation of this task was that: if teacher education students could, through reflection and discussion, recapture the excitement and sense of satisfaction they had gained

through realizing they had understood an idea or mastered a skill, they could focus on promoting that sense of discovery or achievement in their students. Conversely, if they recalled what had inhibited their learning, and became aware of what inhibited the learning of others, they could avoid repeating the same with their students.

Literature review and theoretical framing

The creation of the Learner Biography Project (LBP) activity was influenced by work of Kalantzis and Cope (2008) and Biggs (2003), and endeavours to shift the emphasis in this aspect of a teacher preparation program from 'teaching' to 'learning'. There are three sorts of literature that contribute to the framing of this project, the first considers learning itself.

John Dewey (1916) is often considered an influential theorist on the nature of learning and experience, and much research in this area and begins with his work. Certainly the inquiries of Clandinin and Connelly (2000) have made extensive use of Dewey's views on experience. However, understanding the notion of experience entails some complexity. When it comes to understanding experience in relation to the approaches to learning and teaching of the kind espoused here, it is necessary to develop a "need to know and dispositions for knowing in order to move away from transmission-oriented teaching and learning and toward inquiry-oriented practice" (Tegano & Moran, 2005, p. 287). Tegano and Moran also note that inquiry often conflicts with previous educational experiences and argue that, rather than being delayed until they are more experienced, should begin "in the earliest practica and develop through a continuity of related experiences" (2005, p. 289). Though it could also be argued that developing a 'need to know' should begin before practical teaching experience, as outlined in this paper, because it can begin with reflection on experiences of learning. "Knowledge, therefore, is social, situated, and distributed. By this we mean that knowledge is constructed with others through collaborative experiences that are real or authentic. Learning within these experiences creates zones of proximal development so that work by students on emerging problems is made possible, when shared with others" (Tegano & Moran, 2005, p. 290).

The second body of literature to influence this research was Project-Based Learning (PBL). The first approach to go by the acronym PBL was a medical program at McMaster University in Canada, where it was named Problem-Based Learning. The aim here was to prepare medical practitioners by posing life-like scenarios that students had to work together to solve. This approach to medical training is used in many countries across the world. Project-Based Learning refers to a broader approach that has been used in schools and involves the formulating of a 'driving question' that is often explored by a group of collaborators. Such a project when used in secondary schools requires that students employ a range of research and problem solving strategies (Larmer & Mergendoller, 2010) similar to those skills advocated by the American Association of Colleges for Teacher Education and Partnership for 21st Century Skills (AACTE & P21, 2010). PBL could also be a term that is encompassed by the more familiar term 'discovery learning', according to Bell, Urhahne, Schanze and Ploetzner (2010). More recently Roessingh and Chambers (2011) have observed that the more version of PBL is being more frequently taken up as a learning and teaching approach in universities.

The third and final body of work that informs this project is narratology (Bal, 1997; Fludernik, 2009). Narratology, or theory of narrative, explores one way that we make sense of the world. While often linked with the analysis of literature, narrative is linked to various forms of storytelling. Fludernik (2009) distinguishes between the act of narration, narrative as text, and the story that a narrator tells to help explore these ideas. When considering narrative as text Benwell and Stokoe argue,

The telling of stories is a prevalent part of social life, through which people recall, recount and reflect on their lives. From the mundane narratives that are produced in conversation, to published (auto)biographies and life histories, from the Internet to other forms of mass communication, we live in a 'storytelling society' through which we make sense of our lives (2006, p. 130).

These recollections and reflections comprise the things students do in producing their learner biographies and learner autobiographies and so narratology provides a useful frame for understanding these artefacts. When considered as 'stories' the LBP submissions can be seen to have a narrator, plot, events and characters.

Learner Biography Project task outline

The original purposes of the LBP, as devised, were to encourage students to thoughtfully consider their own learning and to provide a reason to collaborate. Biggs has argued, "there is much evidence that student-student interaction, both formally constructed and spontaneous, can enrich learning outcomes" (2003, p. 89). Students, in their LBP groups, were invited to use the time in five consecutive tutorials to discuss aspects their biographies. This also provided an opportunity to explore the material presented in lectures to stimulate recollections about learning. Importantly, the membership of most groups remained relatively stable over the semester and group members developed a level of trust and an understanding of each other's backgrounds. Kalantzis and Cope have noted the teachers should appreciate the "significance of difference" (2008, p. 10) among learners, and the collaborative aspect of the LBP provided an opportunity to understand learning from other people's perspectives.

No particular structure was recommended as to the way this information should be developed or shared; some students created wikis or blogs to capture ideas and provide a forum for discussion, others talked and made notes. Similarly, no direction was given as to how the information should be reported and while most presented their work in traditional essay form some students provided links to their websites or appended movie interviews that they had recorded with each other. Such creativity was welcomed and assumed that similar approaches might be used in schools as a teaching practice.

Students were asked to form groups with between three and five members. The individuals in these groups were asked to consider what facilitated their learning, what impeded their learning, and how their learning could have been enhanced. Then the students were expected to share these experiences with the other members of their group. All students were required to submit an individual account of their own learning and the recalled learning experiences of the others in the group.

The mode of inquiry used in this research draws of the narrative theory work of Fludernik (2009) and Bal (1997) and combines it with strategies provided by Riessman (2008) and Clandinin and Connelly (2000). Clandinin and Connelly's (2000) work has been particularly important in qualitative research in education. Following Riessman (2008) the various stories analyzed are kept intact and examined for what is being said about learning: what facilitates it, what impeded it and how it could have been enhanced. In doing so various characters (teachers, parents, other students, etc.), situations (home, school, university, workplace, etc.), events and temporal locations may be shown in a new light. The LBP invites students to construct an educational life history (Clark & Rossiter, 2008, p. 68), a type of 'concept-focused autobiographical writing' along with 'learning journals' and 'instructional case studies'.

The work submitted for assessment by two groups of students are the data analyzed in this paper. Approval was sought and gained from the University's Ethics Research Committee-Human Subjects, all data was collected in 2009 and the names used are pseudonyms. In all, twenty-nine participants contributed material to be included in the research project. The two groups chosen for examination in this paper were the first groups in an alphabetical list of students by surname. The first group is a pair of students (Alice and Sandra), initially it was a group of four but one dropped out of the unit and the other joined another group. The second group had four members (Todd, Candice, Sarah and Juliet) who collated their ideas on a wiki that they submitted along with their individual learner biographies. One interesting feature of this groups work was that they detailed their institutional histories of learning before responding to the specific questions. Clearly, the members of the second group saw the schools they attended and the shifts in learning from year to year as important.

Individual narratives

The collaborative learner biography group of Alice and Sandra were individuals with things in common, though separated in age by about ten years. Both described themselves as mature aged students, both had young children and recognized that they had learning experiences outside formal schooling.

Alice's story

Alice described her childhood and adolescent educational experiences as happening in the 1970s and early 1980s. Her mother read to her from an early age and she recalls watching very little television. Alice grew up in a coastal, fishing village in rural New Zealand and attended a government school that had an enrollment of working-class and middle-class background students. The school had a significant Maori population and ten percent of the students were Exclusive Brethren, who ate by themselves and were discouraged from socializing with others. The classes at this school were large, between 36 to 39 students, according to Alice. The teaching methods at the primary school were didactic, blackboard- and teacher-centric, and corporal punishment was still employed. At high school Alice found that the socio-economic status of the student enrollment had declined as the wealthier families had sent their children to board at private schools 50 kilometres away. However, the student body was still predominantly New Zealander-British. She also witnessed and experienced bullying and intimidation at high school and saw teachers unable to control their classes.

In her first year of high school Alice witnessed a radical transformation in the school as a new music teacher was employed, the first for 20 years. This teacher “introduced singing at assembly, concerts, a school band, musicals and a purpose-built music suite.” Otherwise, high school for Alice was relatively conservative and uneventful: the curriculum was limited and subjects were taken along traditionally gendered lines: boys did wood and metal work, girls did home economics, except Alice who found that by doing French she was exempted from doing home economics.

After completing secondary school Alice enrolled in a BA majoring in English, then followed that with courses in journalism and secretarial studies at Auckland Technical Institute, and gained a Certificate 4 in Workplace Assessment and Training at TAFE when she moved to Sydney. Alice also attended evening classes in French and Italian in Sydney and completed a postgraduate certificate in TESOL before enrolling in her BEd (Primary). These educational experiences as an adult significantly altered her appreciation of how people learn, in particular the authentic learning approach adopted in the TESOL program.

Sandra's story

Sandra started school in Sydney in 1970. She explains that her parents were in “their hippy phase” and had moved to Sydney to escape the conservatism of Queensland and both parents eventually completed tertiary qualifications. Sandra understands that much of her upbringing was guided by her parents' principles and that created a “fairly relaxed environment with limited rules” – fond memories of spending long hours playing outside and creating a rich fantasy life. Being read to from an early age, and up until high school, was also a pleasurable memory for Sandra. There was little difficulty moving into formal schooling with the skills Sandra already had, but wanted to be extended and remembers being excited by the challenge from a teacher to find “a creative use for paint”.

In year-four Sandra's parents divorced and she moved to Queensland with her mother and older brother. While this development had a large impact on Sandra's domestic situation, her schooling appeared to proceed without much change, nurtured by caring innovative teachers who set problem solving tasks to advance student learning. Sandra remembers imaginative approaches to learning history, and making a movie. In year-seven Sandra's family moved back to Sydney and she was enrolled in an ethnically diverse, selective high school, although the curriculum was still dominated by a British colonialist perspective. Sandra had a long-standing love of reading, and was horrified that reading had now “been turned into work”. As a consequence she “refused to read any of the prescribed

works, instead relying on crib notes”, though her reading and writing for pleasure continued. Maths and science also seem to have been poorly taught with students being required to complete “boring exercises in the textbook and encouragement being provided to only the most gifted students.”

These experiences and an uninspiring curriculum caused Sandra to become disengaged from schoolwork, and made social activities seem much more attractive. However, to successfully complete year 12 Sandra split with her social group and focused on study. Her aptitude for biology led to study success and encouraged her to enroll in sciences at university. However, Sandra’s university results fluctuated depending on her “engagement with the topic, the lecturer, and events in her personal life”, much like her experience of high school.

Reflecting on the experience of the collaborative learner biography project Sandra observed that exercises that required students to be creative or to think critically were the most meaningful aspects of learning for both she and Alice. The other elements that contributed to their learning were “supportive, respectful teachers who related well to their students and tried to find links in their content areas that students could relate to.” The experiences of learning as adults also highlighted the value of “collaborative learning and creating learning communities” for both Alice and Sandra.

While the differences between Alice and Sandra were distinct, their experiences of what facilitated and what impeded learning were similar. Both agreed that disengaged students and lack of discipline; bullying and disruption; teacher sarcasm; a one-size-fits-all mode of teaching; classroom competition and fear of failure minimized the likelihood of co-operation; dull and didactic teaching; the lack of creative outlets; not using constructivist approaches; disinterested teachers; a lack of support; and large classes all acted as impediments to learning. They also concurred that a nurturing, safe atmosphere; compassionate, kind teachers; certain teaching strategies (like breaking words into chunks in literacy acquisition); an interest in the subject; teacher’s passion and interest in student progress; imaginative and engaging learning tasks; small classes; individual attention; and collaborative activities (for example, school musicals and movie making) facilitated learning for them.

The collaborative learner biography group comprising Sarah, Todd, Juliet and Candice, included an array of differences in schooling style and location: rural, metropolitan and international; homeschooling, government and non-government schools; religious and secular schools; and, co-educational and single-sex institutions. However, despite these differences the insights of the participants about what assisted and inhibited their learning was quite similar. The group decided to set up a wiki to document their school experiences. The design of the wiki provided an interesting interpretation of the task. There were areas for each member to note when they started school and the schools they attended. This was followed by spaces to contribute year-by-year recollections of school highlights. Space was also provided for details of individual Higher School Certificate (HSC) subjects.

Sarah’s story

Sarah began primary school in 1974 and attended the same non-denominational, private girls’ school in Sydney from kindergarten until the end of HSC. This also included some periods of up to a year as a boarder. She recalled her primary school classes being conducted in a dark, forbidding, Victorian-era house, a point also remarked on by the others in the group. Sarah was largely indifferent to the religious activities of the school: the assemblies with hymn singing and passages from the bible read by prefects, the church services, and the requirement that students dressed for church including the wearing of panty-hose and gloves, even in summer. Many of Sarah’s recollections of her schooling involved commenting on unpleasant and distressing incidents: being the last to get her ‘pen license’; the endless spelling drills and the humiliating reciting of maths tables in front of the class, something she often avoided by feigning illness; being frequently chastised and disciplined for talking in class; being given no dispensation for messy hand-writing after having a broken her arm roller-skating; and, hating maths. The things that inhibited and frustrated learning for Sarah were a lack of respect from teachers, enforced competition in classrooms, and teachers who were unable to communicate content, knowledge and/or understanding of student learning. For Sarah, this created an unsupportive learning environment.

In year-three Sarah was excited by the introduction of a book club, which began an intense passion for reading. This interest in books was further stimulated while boarding during year-nine and being expected to do two hours 'preparation' in the library each evening, allowing her to explore the school's collection of books. School for Sarah really did not improve greatly until the final years of secondary school when she "started to get serious", dropped mathematics and took up biology, modern and ancient history, subjects to be studied along with English, art and general studies. The school, she recalled, was also keen to have her maximize her HSC result.

The facet of schooling that facilitated Sarah's learning most positively concerned teachers who "who knew their subjects and inspired curiosity in their students". Two of Sarah's teachers were specifically commented on: her teacher of English and modern history, and her ancient history teacher. Both were passionate and knowledgeable about their subjects, but more importantly both acted as "learning facilitators" encouraging students to question and interpret material in their own way.

Todd's story

Todd began school in 1994, incidentally twenty years after Sarah started, and attended three government primary schools in the Sydney metropolitan area. He then attended a co-educational government creative arts high school which had a distinctive program combining students from year-seven to ten in the creative classes. Primary school for Todd was largely unmemorable until in year-five when he had a "teacher [who] had this amazing presence in the classroom. She was so loud and booming but not in a threatening way. She made us want to learn". For Todd his learning depended on dedicated, passionate teachers and this one also had the capacity to inspire.

The creative stream that most captured Todd's interest was music and this formed the dominant element of his secondary schooling. He specialized in music in every year except during a disruptive phase in year-eight, when he elected to study art. Music was my "crowning glory. [I] played way too much music, way too loud and way too often". In addition to this abiding interest in music, Todd discovered English, in year-nine, through a teacher who encouraged his self-directed learning; in year-ten a "really cool science teacher" who showed respect for the students; and an 'amazing' music teacher in years 11 and 12, who put in many additional hours supporting his study activity. During year 11 Todd wanted to become a doctor, but had abandoned the idea by year's end, and decided on a career as an English and history teacher.

The things Todd claims most inhibited his learning were the boundaries promoted by the labels 'teacher' and 'student'. For Todd these labels signified a lack of respect by the teacher for students and caused him to become disengaged from these subjects. Todd also felt that teachers who lacked creativity stifled his learning.

Juliet's story

Juliet lived in rural NSW, began school in 1992 and attended only one government primary and one government co-educational secondary school. Both schools were considered the best in the area, although both were about half an hour's drive from where she lived. The students enrolled and school staff were predominantly from white, Anglo-Saxon backgrounds. Juliet's primary school encouraged creativity and had a gifted and talented program, which she attended, in years five and six. However, unlike Todd's interests in creative and performing arts, Juliet's creativity was displayed in sciences and languages. Juliet noted that her teachers in kindergarten and year-one were older females and she equated being knowledgeable with being old, like her grandmother who also helped her with her schoolwork. The delay in gaining of her 'pen license' was the cause of some anxiety because, like Sarah, Juliet was one of the last in her class to achieve this status. Like Sarah, Juliet also felt humiliated by her experience with mathematics,

We were made to 'preform' our times tables mercilessly in front of the whole class in turns repeatedly. I was so mortified I couldn't learn them. I'd completely avoid them every time and cry when forced to do them and to this day I still can't do my times tables. On math days I would try to stay home instead but mum would always send me anyway. This started

my great hate [sic] of maths.

In the gifted and talented class maths remained a problem for Juliet and she was often left to work from a textbook while the rest of the class studied more advanced maths. As a consequence, Juliet often left this textbook at home.

High School for Juliet was quite a different experience. In primary school she had been school captain, in a group selected for their 'gifts and talents' and had sampled learning through projects that demanded creativity. High School, by comparison, was a dreary affair. While she excelled in class she found the work boring. Throughout High School maths remained a contested matter but Juliet had planned to enter veterinary science at university and needed maths, along with sciences, and enrolled in biology, chemistry and physics. She loved the science content but hated that it was taught in a boring manner from a textbook. Work experience in a veterinary practice convinced her to reconsider this as a career option, so while she was still studying sciences they no longer supported her career intentions.

Juliet felt that teachers who were committed, responsible and fair to their students facilitated her learning. They also needed to have teaching skills, be knowledgeable in their subject area, be passionate and enthusiastic. The inhibitors to her learning were the meaningless, repetitive drills; the humiliating performances in front of the class; lack of feedback; lack of discussion; and teachers who predetermined what you were capable of doing and judged you accordingly.

Candice's story

Candice started formal schooling in 1993, was homeschooled for the first half of her kindergarten year, then was enrolled in a rural school in NSW for the remainder of that year. Her family moved to Kenya for two years where she continued her education. In spite of being the only white child in the classes in Kenya, Candice found it difficult to return to school in Australia. Back in rural NSW Candice was enrolled in a small school for half of year three then an enormous school in a rural city for the rest of that year, but finds she cannot recall a single teacher from the larger school. Candice was enrolled in a government, one-teacher school with only thirty-two students for years four, five and six. Candice's High School experience was all in non-government, single-sex schools: one in rural NSW and one in Sydney. Of the four students in the collaborative learner biography group she certainly had the most diverse experience of school settings, and unlike the others her school experiences were reported as being relatively carefree and enjoyable.

Candice recalled that in the tiny school her teacher, while very good, "played favourites" and

had a preference and a passion for the indigenous students in the class. ... Also, those of us who were not adept at sport were left behind, as the teacher was obsessed with sport. This left me, being a non-sporty person, feeling like I was not good enough for the teacher, and resorting to 'little girl' tactics to get attention. Starting fights and competing in other areas, such as creative arts.

However, Candice considered being one of only three year-six students did have some benefits.

The private girls' school in the country provided for Candice positive memories of teachers who "were very gentle and enthusiastic about their subjects", of making good friends, playing sport "even though I wasn't brilliant at it", and having an interest in music fostered. In this school "there was a great sense of community". Moving to Sydney was one of Candice's greatest upheavals and she refused to go to the new school for the first three or four weeks. It "was not as warm an environment as the previous school. The teachers were nice, but not as understanding of a dislocated country student as I would have like." By year-ten the adjustment to the city had been made this was one of Candice's best, but mainly social, years at school. Teachers were variously described as great, great (English), ok (maths), weird (geography) and strict and mean (science), but music and drama were really Candice's preferred territory.

Candice reported that "boring teachers and hot days" did not help her learn. What assisted her were

teachers who were enthusiastic and set interesting tasks; loving the subject; and friends. Interestingly, Candice contributed “I loved being spoon fed information, in a logical way. I know it sounds easy but it really did help my learning. I didn’t like having to think for myself until university.”

For all the differences of school setting, style and location the members of this collaborative learning biography group formed a consensus of what facilitated their learning. Juliet summed up these common points of assistance as:

- Engagement comes with relevance
- A safe, respectful learning environment
- Learning should be modeled by teachers
- Teachers need to be seen as dedicated and worthy of respect
- Teachers need to communicate effectively and cater for differences in their students

For the most part the things that impeded learning were an unsupportive learning environment; disrespectful teacher-student relationships; being obliged to compete; and teachers who were unable to communicate content, knowledge and an understanding of differences between students.

Results and conclusions

The results presented below are partial and intended to serve as an indication of how narrative analysis reveals aspects of pre-service teacher views on learning and on the Learner Biography task. Interestingly, the idea of Project-Based Learning had not really made an impact when the LBP was devised. It was more deliberately an attempt at devising a way that to get students to document their own learning biographies and to see what emerged. As a PBL activity a number of improvements could and should be made in light of the literature that has been published since the project was first conceived. However, the student submissions and the narratives constructed are revealing in their diversity and reflections by the pre-service teachers instructive.

About learning

There is a strong sense of students experiencing quite inappropriate situations but assuming that they had to learn to deal with these ‘normalized’ conditions. Alice recalled a school with stairs into every room, completely inaccessible to wheelchairs, and realized as an adult that this accounted for her seeing only student with a mobility disability. Likewise the dominant New Zealand/British culture of her schools in the 1970s and 1980s rendered the Maori student population culturally invisible. The normal conditions of these schools were, on reflection, recognized as inherently unfair.

Sandra and Alice shared a love of reading. Alice’s mother read her English Victorian and Edwardian classic children’s literature before and throughout primary school. One consequence of this early immersion was Alice completing a BA in English at university. Sandra responded quite differently, she refused to read some of the English texts presented because they made her favourite activity (reading) into schoolwork. No doubt some of the recollections were influenced by the ideas being presented in lectures for the unit, constructivist learning for example is not a term that was being used when Alice and Sandra were in school, but then the process of teaching was rarely talked about with students in the 1970s or 1980s.

There was little room or time for constructivist learning in my school classrooms and classes were even more rigid at secondary school. We were sponges programmed to soak up the cannons of established knowledge (Alice).

While few students commented on the physical environment of the school, Alice noted a comment made by Sandra in their discussions.

Sandra regrets the ‘lack of an outlet for creativity and choice’ in her schooling. We had little opportunity to be active learners with control and responsibility for our learning. I

think there is more variety and mobility within the classroom and its physical layout now and the opportunity for more collaboration helps with motivation (Alice).

This was not an observation that Sandra herself had contributed but makes sense when considering some of the new possibilities now available in both classrooms and in the thinking about learning environments.

Listening to Sandra, I realized how much things have changed and that many of my positive learning experiences have happened since I left school and studied as an adult. I think the adult learning has changed my attitudes to teaching, learning, and my 'philosophy of teaching' from what I learned at school so long ago (Alice).

Much of this illustrates the potential of collaboration as a mode of learning.

Recollections of teachers provided the clearest and most polarized views. Teachers facilitated learning when they clearly understood the content and were inspiring (Candice), when they were committed, acted responsibly and fairly (Juliet) and were enthusiastic and interested in a student's progress (Sarah). Similarly, when teaching practices scaffolded learning (Candice), promoted freedom of expression (Todd) and cultivated skills (Juliet) students saw the contribution as positive. When teachers were perceived to have little respect for the student or did not recognize students as being knowledgeable (Todd) they frustrated learning. Also, when teachers created "content overload" (Candice), were boring or uninspiring (Candice; Sarah) or didn't check that the fundamentals were understood (Candice) learning was less likely to occur. Alice contributes another angle on this matter.

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About the Learner biography Project

While students were asked to consider their learning and the learning of their group members, many reflected positively on the activity. For example, Sandra commented, "I think the strength of this exercise has been highlighted for me in that instead of just dashing something off, I have constantly been forced to stop and really ponder the meaning of learning and getting an education". Finally from Alice,

I am hopeful that, in reflecting on our learning experiences, we will avoid some of the mistakes we encountered in our pasts and be more self-aware when we feel tempted to retreat into the practices inflicted on us as children. To end on a more positive note, I hope to take some of the inspiring teaching practices I experienced [in the unit] and share them for better outcomes in a learning community in the future.

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