

## Using patchwork text assessments to support and document the learning process

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At the last two CRA Annual Residential Seminars (2012 and 2013) I have run a workshop aimed at allowing the participants to experience what it is like to produce a Patchwork Text Assessment (PTA) on a topic of their choice. We have then discussed different features of this type of assessment and identified opportunities it offers. Finally, we have considered, from a research point of view, ways in which PTAs can make visible the learner's process of construction of knowledge, including gains in subject knowledge and epistemological shifts.

These workshops are based on the experience of using a PTA in an undergraduate programme in psychology for the last four years and conducting some action research.

### Background

At the end of the academic year 2008-9 the teaching team of a Level 6 (one semester long) unit in Critical Social Psychology reviewed the teaching and assessment strategies. The latter included a position paper (1,000 words) and a full-blown 2,500-word essay on a set question. The experience so far, was that the weakest students struggled with the complex literature and performed poorly or plagiarised. The team agreed that the students needed to have ownership of their learning and should be able to choose a topic of their interest (options were: aggression, personhood, relationships and emotions) and apply the critical perspective, comparing the results with how mainstream social psychology conceptualised the topic. We also decided to encourage the learners to draw on their prior knowledge, rather than assume they would start from scratch. This change was inspired by experiential learning (Kolb, 1984; Boud, Cohen & Walker, 1993; Gregory, 2006). Additionally, elements of inquiry-based learning were introduced in the shape of group sessions where students would generate questions themselves and then follow them up individually in two cycles of inquiry, coming together to share their progress.

### Experience of using PTA

#### DePTA project 2010

The changes described above were implemented in 2009-10 with some very positive effects, but the essay still presented problems; although the levels of plagiarism and non submissions had dropped, the average grade was low 7.9 (C-) (see table1). In 2010,

the teaching team participated in a JISC-funded action research project along with five other universities and we were able to replace the final essay with a Digitally-enhanced PTA (see <http://dpta.wordpress.com/>).

Table 1. Submission rates and performance for Assessment 2 over the last five years.

	2008-9 N=43	2009-10 N=32	2010-11 N=24	2011-12 N=52	2012-13 N=59
Submissions	34 (79 %)	31 (97%)	21 (87%)	50 (96%)	56 (95%)
Mean	9.9	7.9	11.6	10.4	9.1
Stdv	3.3	3.6	3	3.4	3.5
Dos	2	2	0	0	0

Grades use a scale 1 (F-) – 16 (A+). Dos: Disciplinary offences (plagiarism)

Richard Winter (2003a) defined PTAs as an alternative to essays: “the patch work text assignment consists of a carefully structured series of short pieces of writing, carried out at regular intervals throughout the course - typically over a term or semester”. The “small-scale writing tasks are varied in style and genre”. (e.g. accounts of personal experience, critical reviews, research proposal, etc.); “each piece of writing is shared with other students” and the tutor. At the end: “students submit an overall assignment consisting of their collection of short pieces (edited and perhaps amended) together with a final retrospective commentary” (see also Winter, 2003b).

We were convinced that the requirement to write short pieces ('patches') would appear less daunting to the students. Also, the possibility to make changes and edit them until the final deadline would contribute to lowering the stress. The structure was as follows:

- Patch 1 (400 words): Prior knowledge and experiences associated with the chosen topic from a small range of options (emotions, aggression, personhood, relationships).
- Patch 2 (400 words): What mainstream social psychology has to say about the phenomenon (based on two key questions).
- Patch 3 (400 words): How critical social psychology would conceptualise the phenomenon (based on two new questions).
- Patch 4 (800 words): A critical review of an article presented at a seminar.
- Final commentary (500 words): A reflection on the learning journey and a position with respect to the two approaches.

The PTAs were written as blogs in PebblePad to which the tutors had access for monitoring and assessment purposes.

Nineteen students consented to having their PTAs analysed for research purposes. We interviewed eleven of them at the end of the semester (after the grades had been submitted) about the experience. The main points emerging from these interviews can be summarised as follows:

The PTAs had supported the students' learning and, in some cases, it had felt far less stressful than the traditional assessments where there is one single final submission. Many said that the assessment represented their learning process well, as much as the final stage of their knowledge. Many said they had enjoyed this new way of learning that seemed justified in the unit. However, it must be said that the novelty generated considerable anxiety at the beginning and we realised that much more information would need to be made available at an early stage. Although considerable time was devoted to producing marking criteria that were appropriate for the assessment, there was room for improvement in this respect.

## 2011-2013

The PTA has continued as the main assessment in the unit in Critical Social Psychology. This has allowed us to monitor the students' performance over three years. As can be seen in table 1, submission rates continue to be very high and no cases of plagiarism have happened for some time, but the mean grade has been dropping consistently, for which we do not have an explanation. Last academic year the average grade was 9.1 which is equivalent of a C.

Although the majority of the students write their patches on time, some students experience difficulties with the technology. Despite the multiple instructions provided at the beginning and through the VLE, several students don't seem to be able to come to terms with the way in which a blog works in PebblePad and require substantial assistance on the part of the tutors.

However, overall, the students' evaluations of the assessment are positive. Internal reviewers as well as the external examiner consider this as an innovative type of assessment which should be extended to Level 4 and 5.

## Research dimension

The DePTA project included a research dimension which involved analysing a sample of the PTAs produced by students taking the unit in 2010-11. This was based on Grounded Theory (Glaser & Strauss, 1969). Although initially, we drew on argumentation analysis (Toulmin, 1958; Liakopoulos, 2000) in order to identify the components of the arguments present in the patches, we encountered some difficulties with this model and soon developed a simpler version consisting of *main claims*, *supportive claims*, *examples/data*, *quotations* and *questions*. To this we added the notion of *epistemological comments* ('epi-comments') which included numerous statements that were not about the phenomenon, but about some aspect of the learner's knowledge of the phenomenon.

The main outcomes of this pilot study included a taxonomy of different types of main claims and specially epi-comments. The categories and codes were used to content-analyse the PTAs and identify trends. An example of how a patch was coded can be seen in table 2 (see appendix). One of the unexpected finding was that a third of all statements were epi-comments, about as many as main claims (see figure 1). This shows how important it is for the students to comment on the knowledge they are using. Therefore, it is possible that these types of statements help connect and make sense of their arguments.

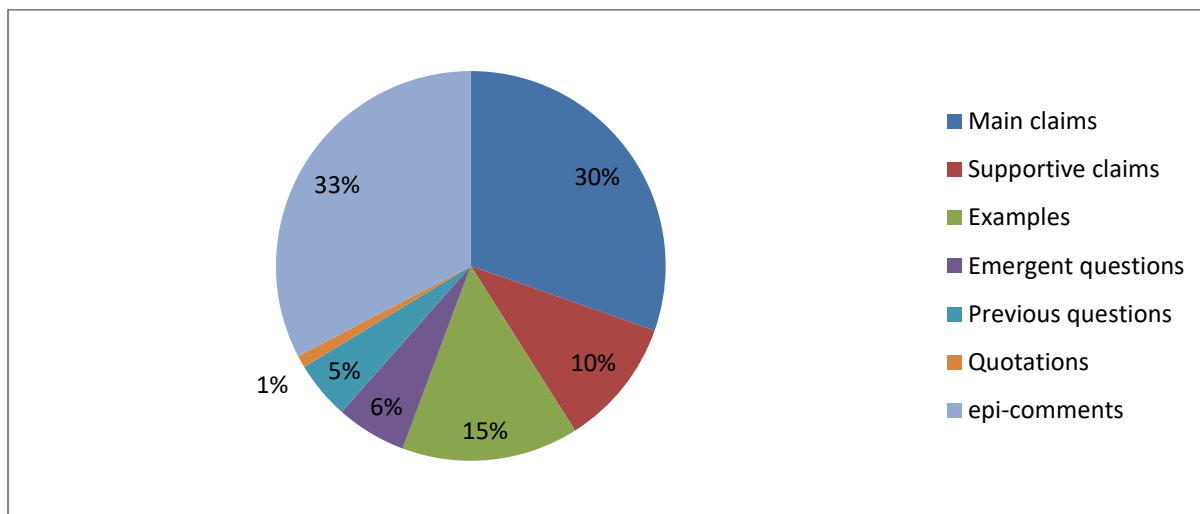


Figure 1. Statements across the four components of the PTAs for all participants.

A second research project carried out in the second semester of 2012-13 allowed us to explore trajectories of developmental change that can take place over the 12 weeks that the students work on their PTAs. Briefly, there is an increase of epi-comments, compared to main claims, as students progress from patch 1 to the final commentary. Among the main claims, there is a tendency for initial patches to have many more claims that attempt to define the phenomenon, then in the second patch to explain it in causal terms (typical of mainstream social psychology) and later to make claims about the phenomenon from a perspective, be it a theory or model (in patch 3). In terms of the types of epi-comments, there is an increase in statements that refer to the context of ideas in patch 3 and the final commentary. These trends can be interpreted as suggesting microdevelopmental changes that occur in the students' personal epistemologies (Perry, 1979; King & Kitchener, 2002; Baxter Magolda, 2004).

The findings of both projects have been presented in various venues (Gaitan, Adonu, Jankowska, 2012, 2013, 2014; Gaitán, Jankowska,, Adonu, Hand, Scott, & Rian-McMahon) and publications are in preparation.

## CRA workshops

At the last two CRA Annual Residential Seminars (2012 and 2013) I have run workshops where participants chose a topic in a similar way to our students. The options were:

- Learning in HE, similar/diff compared to Secondary Ed
- Motivation for learning
- Assessment and its impact on learning
- Creativity: its place in HE
- Personal Development Planning

They simulated the production of a PTA which would normally happen over the course of 12 weeks in just over an hour. They worked in pairs, unlike the students who work in small groups of four people and also they wrote the patches together while the students would do so individually. All work was done on paper. The first stage involved sharing what they knew about their chosen topic (prior knowledge) and writing a first patch summarising this. They also proposed two key questions that they would like to use in the next stage of their inquiry.

Two participants in the last workshop wrote about creativity in HE:

- *(It is) not restricted to the creative arts and humanities, but should be part of all programmes.*
- *It is key to learning in HE.*
- *It can be developed in HE.*

And their questions were:

1. *How can it be developed in HE?*
2. *How can we communicate its effectiveness as a learning tool*

In the second stage, participants were invited to skim-read through a report on the experience of students in English universities (Bekhradnia, 2012). The report contains many useful figures regarding the amount of contact hours (scheduled teaching by subject), hours of teaching, hours students missed, time devoted to private study, etc. This task simulated the individual study the students in our unit would undertake in order to answer the questions chosen from a mainstream perspective. After 10 minutes they wrote a second patch summarising what they found out in relation to the questions.

The same two participants wrote in their second patch (choosing to address only the first question):

*Low contact time in Historical and Philosophical studies, but high NSS scores!*

- *Hence, creative use of contact times and freedom to creatively explore the curricula.*
- *Can high level of self-directed study impact on creativity?*

In the third stage, we attempted to expose the group to some critical material, in this case Ken Robinson's TED talk 'Changing education paradigms'. Critical materials aim to disrupt the learner's thinking by challenging taken-for-granted assumptions about a topic and the accepted disciplinary theories and methods. This is not the same as critical thinking skills which are simple tools to critically evaluate a piece of work in terms of strengths and weaknesses. By contrast, critical traditions or schools of thought exist within certain disciplines (e.g. sociology, social psychology or education); they develop rigorous critiques of a dominant paradigm and propose radically different perspectives in terms of epistemology and ontology. While participants in the workshop were asked to write new questions about the topic drawing on the critical material, in real life students formulate new questions before they search for critical sources. A third patch followed in which participants formulated the following questions as part of a second cycle of inquiry:

- *How can we break the system of factory education and unlock creative minds?*
- *How can we encourage divergent thinking in all discipline areas of HE?*
- *How can we reflect this in the 'non factory' curriculum in HE?*

For obvious reasons participants in the workshop were not able to write answers to their new sets of questions or share their newly constructed knowledge.

The last stage involved writing a final commentary. The participants' text sums up their experience very clearly:

*The process enabled us to explore our existing knowledge. This was reviewed in the light of new evidence (from the report). This enabled us to reconsider creativity in the sector and the impact of the historical development of education.*

*We were able to review our own divergent thinking to develop a more focused-based transformational approach to the topic. So this will now enable us to take this new understanding of the learning (and unlearning) process and explore it in new ways.*

## Conclusions

- From our experience of using PTAs in a unit for the last four years and conducting research on our practice, we can conclude that this type of assessment is a valuable tool with which learners can document their learning through different stages of the process, from beginning to end.
- PTAs can support the learning process (construction of subject knowledge that takes into account prior knowledge) by providing a structure for the production of texts in a regulated manner. The learner can review (and revise) previous texts which become the stepping stone for the next one.
- PTAs take away the stress from assessments by requiring that learners only write a short piece at a time and allowing them to edit them as many times as they want (but not replace them with totally new ones). The high submission rates support this.
- PTAs increase a sense of ownership by allowing students to use a more personal, experiential and reflective style. This can explain the virtual disappearance of plagiarism.
- PTAs can be combined with a pedagogy that recognises the value of students' prior knowledge and experience (experiential learning) and guides them through a personal learning process by focusing their efforts on questions that they have generated (inquiry-based learning).
- PTAs can help promote and document shifts in thinking and personal epistemologies, especially when a critical approach is introduced that contrasts with a mainstream traditional one.

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## Appendix

Table 2. Structure of the arguments in a Patch written at the beginning of the learning process.

Line	Statement	Category	Position	Code	Linked to
1	Reflecting on my position paper 1	epi-comment	e1	Reference to PP1	
1	I realise that there are some gaps in my explanations of personality	epi-comment	e2	State of one's knowledge before	
1	Personality (is not a set of) (fixed) traits, features or types	Main claim	c1	The phenomenon - definition	
5	I see personality as something fluid	Supportive claim	s1		c1
5	We express personality in social contexts	Supportive claim	s2		s1
8	questionnaires cannot measure personality	Main claim	c2	measurement of the phenomenon	c1
12	Personality develops through life	Supportive claim	s3		s1
13	my behavioural expressions have changed	example	ex1	Example from one's life	s4
17	we change as a result of gained knowledge through experiences	Supportive claim	s4		s3
20	pregnant women who through the birth of their child see a radical change in themselves	example	ex2	Example from general	s2
21	the source of example was my mother	epi-comment	e3	source of an example	ex1
24	every single individual in the world has a different personality	Main claim	c3	The phenomenon definition	
25	claim is difficult to prove	epi-comment	e4	proof of a claim	c3
27	compare personalities to the diversity of genetic compositions	epi-comment	e5	analogical nature of a claim	c3
32	I intend to further explore ideas of the self and identity based on traditional social theories and critical social perspectives.	epi-comment	e6	Reference to next stage	