



University of
Salford
MANCHESTER

The impact of annotation on students learning

Ball, E, Franks, H, Jenkins, J, Leigh, JA and Mcgrath, ML

Title	The impact of annotation on students learning
Authors	Ball, E, Franks, H, Jenkins, J, Leigh, JA and Mcgrath, ML
Type	Monograph
URL	This version is available at: http://usir.salford.ac.uk/1991/
Published Date	2005

USIR is a digital collection of the research output of the University of Salford. Where copyright permits, full text material held in the repository is made freely available online and can be read, downloaded and copied for non-commercial private study or research purposes. Please check the manuscript for any further copyright restrictions.

For more information, including our policy and submission procedure, please contact the Repository Team at: usir@salford.ac.uk.

The impact of annotation on student learning

FINAL REPORT

Dr Elaine Ball Helen Franks Jane Jenkins Jackie Leigh Maureen McGrath

This project was funded by the Teaching and Learning Quality improvement Scheme (Ref: NUF 8N).

Thanks also go to Dorothy Oakey and Angela Cross for their ongoing support throughout the project phases.

1. Introduction

Annotation as a device is used by some of the most influential thinkers of the 20th Century. In his book *Margins of Philosophy*, Jacques Derrida discusses the problematic nature of authoritative discourses and uses annotation to disrupt authority by writing in the margins. He positions himself throughout all of his works as a marginal philosopher. Julia Kristeva and others write about the intertextual relationship between text and comment; writing from the periphery they use annotation as a device to destabilise authorization (or the central text). Annotations for creativity or correction share many of the same characteristics: engaging with writing to critique, revise, question, support or dispute and bring about change. Annotation, in education to support and direct learning, is brought into play by leading thinkers to complicate meaning. Although a preliminary point, it bears light on the ambiguity of annotation. We needed to establish then if annotation as a feedback practice produced transparency or ambiguity. By writing in the margins of student's essays, we needed to consider if we destabilise meaning so that when we place our annotative marks or lines besides the student's work we are not transparent enough and obscure meaning further? Annotations, as Marshall observed can be "telegraphic and incomplete. A highlighted sentence, a cryptic marginal "No!" an unexplained link ... all pose interpretive difficulties for anyone other than the original annotator (and the passage of time sometimes erodes that privilege)" (1998, pg. 41-42). What this means is that when the annotative mark stands alone without preface or addendum, transparency is put into question. Words that stand alone in the margins of a student essay can be seen as abstract signs to the novice reader that need contextualising. If annotation is intended for others to read it must be "crucially related to intelligibility" (Marshall 1998, pg 41) and be transparently unambiguous to be helpful to the reader.

This is true however of all feedback. It should be "specific, accurate, timely, clear, focused upon the attainable and expressed in a way which will encourage a person to think and, if he or she thinks it necessary, to change" (Brown *et al.*, 1997, p. 4). It is a valid summary and much cited in educational literature, but although eight attributes are listed for feedback to be effective, it does not go far enough in grappling with the links between the theoretical basis of feedback and the student's ability to take hold of the message and utilise it. We need to be able to make available a conduit or link between the theoretical substance of feedback and its application. In order that feedback is not lost in translation identifiable links need to be made to the actual essay weakness. This is what we hoped annotation would provide. Some supporting literature observed that feedback is of great benefit to students when definable areas are identified (Stefani 2005). Students benefit from feedback when it is directly linked to the composition (Urquhart and McIver 2005). However, underlining student essays has no impact on the students' perception of poor essay technique (Wolfe 2002). Positive or negative

commentary in the composition influences students' work (Wolfe & Nuewirth 2001). Students who receive evaluative annotations are more likely to pay closer attention to feedback than are students who receive the same material without annotation (Wolfe 2001). Whatever emphasis on assessment is chosen, tutors and students need crystal clear explanation on assessment criteria (Crook, Gross & Dymott 2006).

2. Rationale

Annotation was introduced into the School of Nursing as part of a quality initiative, as recommended by the Quality Assurance Agency (QAA, 2006). The rationale for the study was based on the School's aim to provide evaluated evidence-based quality feedback. A number of issues needed examining as staff annotated very differently from each other, we needed to find if students and staff preferred a more standard version of annotation. We also needed to find out if different annotative styles such as content, length, tone and legibility had an impact on the student. It was important to know if the staff as second markers found annotation distracting. Anecdotally, some staff felt annotation added to their workload, or they had little or no experience of annotation; therefore, it was essential to know if this was the case.

3. Course programme details (see table A on pg. 6)

The study focused on students undertaking Post Qualifying Level 3 programmes which included BSc (Hons) Nursing Studies; BSc (Hons) Therapeutic Interventions; BSc (Hons) Psychotherapeutic Interventions; BSc (Hons) Mental Health; BSc (Hons) Clinical Leadership (Specialist Practitioner); BSc (Hons) Community and Public Health Studies; BSc (Hons) Acute Child Care and BSc (Hons) Adult Nursing. Students undertaking Level 2 Post Qualifying programmes (Diploma in Nursing and Diploma in Community and Public Health) were involved in the pilot study only. Staff who taught on the Level 3 Post Qualifying programmes were involved in the main study.

4. Original aims, objectives

Funding from the Teaching and Learning Quality Improvement Scheme (TLQIS) enabled a small team in the School of Nursing to explore the impact of annotation on student learning, and the perceptions students and lectures had of annotation as an assessment tool. The project aimed to explore the use of annotation as a means of marking and assessing student summative coursework. The five original aims are outlined below:

1. undertake a literature review on the effects of different forms of annotation on student learning
2. explore staff and student viewpoints on annotation

3. identify the impact of different forms of annotation on student learning in the School of Nursing
4. report to the Teaching and Learning Development Sub-Committee
5. assist in the process of developing annotation guidelines for the School of Nursing and inform annotation practice within the Faculty and Health and Social Care

4.1 Outcomes and benefits

The literature review helped identify issues around feedback and annotation (although the latter had very little written about it), note potential problems and solutions supported by the literature and empirical evidence. Feedback from the questionnaires enabled us to identify student and staff perceptions, challenges they encountered and plan ahead implementing annotation from a School/Faculty level to an institutional level. The focus group helped identify other qualitative issues that impacted on teaching and learning such as the time it takes to annotate and cross-mark.

5. Description

The project comprised five phases. A literature review was undertaken and identified the different types of formative and summative feedback at Salford and other higher education institutions. A random sample of level 3 post qualifying annotated student scripts, 20% of approximately 200 scripts (no = 40), were collected and analysed for versions of annotation such as type, style, content, sign, difference, similarity, length, approach, clarity, tone, accessibility and decipherability. Staff and student questionnaires were developed utilising the findings from the literature review. Both were piloted with small numbers from their respective target groups. The student piloted response was good (n = 11/11), the staff pilot elicited a poor response (n=1/10) and was re-sent (the poor response is evaluated in section 7). Following the pilots' small changes were made to the questionnaires and were subsequently distributed. The staff and student data from the questionnaires was then analysed by the project team using SPSS for quantitative data and thematic analysis for qualitative data. The qualitative data was eventually analysed using content analysis. A focus group in phase 4 of the original bid was optional, but was carried out for staff to make the data more robust due to a low response rate. Phase five reported findings which are presented in subsequent sections. Considerations of how the project changed from the original bid are explored in section 7.

6. Evaluation

Integrating qualitative and quantitative data enhanced validity and avoided the limitations of a single approach (Polit & Beck 2006). All methods of data collection elicited rich findings and produced a multi-perspective:

- The literature review provided an evidence base and understanding of the wider implications of annotation
- An overview of policy and procedures from other higher education establishments enabled us to see what methods of annotation were being used and foster innovation if it presented itself
- The sample of essays provided insight into the different ways lecturers' annotate and the way in which tone and expression has an impact on the student
- The student questionnaires gave a good statistical picture of the perceptions of annotation
- The staff focus group and questionnaire combined gave an overview of annotation and wider issues of marking

The questionnaires were constructed using a mix of Likert scale questions and a number of open questions to capture both quantitative and qualitative data. 249 questionnaires were distributed to the total student population registered on 17 different modules at Level 3. 124 completed questionnaires were returned, representing a response rate of 49.8% of the total possible sample. 72 questionnaires were distributed to post-qualifying teaching staff, 14 returns represented a response rate of 19.4%. Quantitative data were individually coded and entered onto SPSS Version 15. Two members of the research team checked data to establish accuracy and reliability of data entry. Descriptive statistical analysis was carried out to establish both the frequency of responses and corresponding percentages. Evaluation of the quantitative analysis is presented first. Student and staff responses to their respective questionnaires will be considered separately.

6.5 Student Questionnaire

Results are discussed in relation to the different sections of the questionnaire. Where there was less consensus, tables have been included to indicate the spread of responses for those themes.

Table A represents the different programmes undertaken by respondents

Programme	Number of students
BSc (Hons) Nursing Studies	26 (21%)
BSc (Hons) Acute Child Care	22 (17.7%)
BSc (Hons) Adult Nursing	26 (21%)
BSc (Hons) Psychotherapeutic Interventions	3 (2.4%)
BSc (Hons) Therapeutic Interventions	14 (11.3%)
BSc (Hons) Community & Public Health Studies	10 (8.1%)
BSc (Hons) Clinical Leadership (SP)*	2 (1.6%)
BSc (Hons) Mental Health	1 (0.8%)
Other*	17 (13.7%)
No Response	3 (2.4%)
Total	124 (100%)

*SP = Specialist Practitioner. Other = students taking single modules

50% of respondents had only experience of annotation at the University of Salford, and 24.2 % had experience from other establishments. Generally there was a higher non-response rate for questions towards the end of the questionnaire.

What annotation achieves and how it is useful in terms of learning

- There was agreement or strong agreement that annotation helped to inform the next assignment (82.2%); provided specific feedback (81.5%); provided accurate feedback (71%); identified strengths (69.3%) & weaknesses (76.6%) & helped learning (71.8%)

How annotation improved knowledge and essay writing

- Respondents demonstrated a strong consensus in this section of the questionnaire. There was agreement or strong agreement on the following: Correction of errors in assignment (66.1%); identification of areas for change (69.8%); improvement of future performance (71.8%); encouragement to reflect on ways to improve work/learning (65%)

Annotation & sensitivity of feedback

- Respondents disagreed or strongly disagreed with the following statements:
Annotation is not written in a way that motivates (42.7%); tone of annotation undermines confidence (36.3%): note that 38.8. % agreed or strongly agreed with this statement; annotation did not help improve future work (61.3%); made student focus only on negative feedback (49.2%). Generally this section demonstrated less consensus amongst respondents than in previous sections. The strongest consensus here was regarding the role of annotation in helping improve future work and this is reflected in responses to the section on what annotation achieves and how it is useful. Please see Table C for spread of responses. Table B shows the statistical range of answers in relation to interpretation, legibility, clarity and focus. For annotation to be transparent, it was crucial that it met these objectives.

Table B

Question	Agree/ Strongly Agree	Disagree/ Strongly Disagree	No Response	Invalid response	Total
I am not able to interpret annotations on my assignment	14.5%	59.7%	21.8%	4.0%	100%
Annotation is difficult to read	24.2%	46.8%	21.8%	7.3%	100%
Annotation does not provide clear feedback	12.9%	62.1%	21.0%	4.0%	100%
Annotation does not provide focused feedback	12.9%	58.9%	22.6%	5.6%	100%

Table C

Question	Agree/ Strongly Agree	Disagree/ Strongly Disagree	No Response	Invalid response	Total
Annotation is not always written in a way that motivated me as a learner	31.5%	42.7%	22.6%	3.2%	100%
The tone of some annotation undermines my confidence	38.8%	36.3%	23.4%	1.6%	100%
Annotation did not help me improve work for future assignments	9.7%	61.3%	25.8%	3.2%	100%
Annotation makes me focus only on negative feedback	23.4%	49.2%	23.4%	4.0%	100%

Generally the results from the students' questionnaire show that students view the practice of annotation positively enabling them to reflect on criticism, improve for future performance, set new goals, use annotation as a guide to develop skills, and re-submit either more confidently or more successfully. Aspects that need greater consideration relate to style and tone. We learnt that annotation is different from other forms of feedback simply because it is written on the student's page: it requires greater sensitivity as it is in dialogue with students' work. Wordings should be sensitive, constructive, aware of tone being used and should be transparent as the tone of annotation and the way in which it is written can impact on motivation and undermine confidence.

6.6 Staff Questionnaire

- Staff responses largely echoed those of the students – for example annotation providing focused, clear feedback, enhances a student learning approach, and contained underlying properties such as tone. These are discussed in relation to the different sections of the questionnaire (see appendix 3). The completion of the questionnaires by the 14 staff was almost 100%, with only one of the questions in one of the questionnaires left unanswered.

What annotation achieves and how useful it is in terms of learning

- There is clear agreement between staff and student responses to this section. Respondents said annotation always provided specific feedback (12 respondents); provided accurate feedback (10); identified strengths (10) and weaknesses (10) in the assignment; informed future assignments (10); provided balanced remarks (9), and identified areas for change in assignment (9).

Ease or difficulty in interpreting annotation and transparency of practice

- In this section respondents disagreed or strongly disagreed that annotation did not provide clear feedback (13) or focused feedback (12). There was no consensus on other items (appendix 3) but it is interesting that 8 respondents felt that annotation can be difficult to read. The majority of student responses disagreed with a similar statement. This discrepancy may be due to small staff responses or to the slightly different way in which this question was asked i.e. ‘can be difficult to read’ (staff) as opposed to ‘is difficult to read’ (students).

How annotation impacts on you as a cross-marker

- The majority of staff responded ‘sometimes’ in this section: identification of good annotative practice from others (10) and range and variety of annotation helping students (8). There was less consensus about objectivity influencing the first marker. 8 staff said annotation should not be standardised (4 choosing ‘never’ and 4 ‘rarely’).

Annotation requiring greater sensitivity than other feedback styles

- Respondents agreed or strongly agreed that annotation enhances a student- centered approach to learning (14); increases awareness of the impact of criticism on the student (14); contains intrinsic properties such as an underlying tone (11). 12 respondents agreed that stand alone comments such as ticks or lines are helpful annotation styles to the student. There was no consensus about annotation reflecting the marker’s feelings or attitudes towards the student (7 agreeing or strongly disagreeing; 7 disagreeing or strongly disagreeing).

Results from the staff questionnaire viewed annotation positively in terms of its influence on students learning. There was recognition that annotation conveyed a tone and the student survey indicated that the tone of some annotation can undermine confidence. This aspect of annotation has been an important message to convey in the workshops and development of guidelines.

6.7 Defining annotation

Because annotation was new to a number of students and staff, it was important that we identified and categorised the different ways in which both samples defined annotation generally. Analysis of the responses suggests a good understanding of annotation by both students and staff. Often, but by no means always, definitions were bound-up with their conceptions of the purpose of annotation. To get a definition of terms, both students and staff were asked: “What do you understand by the term annotation?” Answers ranged from sophisticated explanations: “annotation is indicating areas for development and also areas of

good scholarly style within the text of an assignment. To annotate (as I understand it) generally means to comment on something, interpret and explain”, to brief but astute description: “notes on a page”.

6.8 Focus Group results

It was difficult to bring staff from the three branches of nursing together for a focus group at a convenient time, therefore a focus group was set up with staff from the adult branch of nursing (n=5). Child and mental health nursing staff were followed up (n=3) separately. This stage enabled us to garner more qualitative information and allowed us to fine tune the content of the above findings to develop a more robust teaching and learning resource that can be used across the Faculty of Health and Social Care. Findings revealed wider issues of concern around feedback relating to time. There was agreement that annotation is time consuming and adds to the burden of marking. This can potentially impact on staff and students in different ways: staff are influenced by the first marker and students can get too much annotation when written by two markers. These perceptions had not been apparent in the analysis of the questionnaires.

7. Developments (problems encountered, proposed changes)

Poor response from the staff questionnaire, in relation to the pilot and the executive questionnaire was the biggest problem encountered. Providing an ethical and reasonable time in between prompting staff to return questionnaires meant that this phase of the project severely impacted on the project deadline.

8. Consideration of how the project has changed and developed from the original bid

The initial bid proposed a thematic analysis of the qualitative data in the expectation there would have been more qualitative data than the staff questionnaire actually elicited, due in part to the poor staff returns (although a lot of qualitative data were extracted as staff answered most of the questions), and students ticking the boxes, but answering very few of the open questions. Instead of a thematic analysis, a content analysis using the pre-determined themes identified in the literature review was utilised.

9. Transferability

Two of the key objectives of the research project were to offer guidelines on annotation and schedule workshops to explain the annotation guide. A number of initiatives are already underway. Findings have been disseminated through a series of School of Nursing marking workshops. Also, findings have been presented at the 8th Annual Interdisciplinary Research Conference Transforming Healthcare through Research, Education and Technology, November 2007; University Student Retention Project Forum, 2007; Education in a Changing

Environment Conference 4th Annual Conference, September 2007 and forthcoming the 2nd International Nurse Education Conference, NETNEP 2008. A masterclass will be hosted through the SCNMCR aimed at staff within the School of Nursing and the Faculty of Health and Social Care. Full details of all dissemination is located on the SEEK website at <http://www.SEEK/salford.ac.uk> and will be managed by the research lead.

Comparing the School of Nursing annotative practices with other faculties in the university gave us an insight into what other disciplines might need at the point of transferability. However, because students were not necessarily typical of other student groups we need to be prudent in relation to transferability: students were all from a postqualifying population which is not representative of the wider student populace insofar as it is largely practice led and practice funded. Students on post-qualifying programmes are often in full- or part-time occupation and follow a part-time route.

10. Discussion of less successful elements of the project

Less successful elements relate to three areas. Low return of staff questionnaires resulted in minimal qualitative data (already discussed). Dissemination of findings met with some disquiet and created debate within the marking workshops about how lecturers can be sensitive in their annotative tone when an essay fails and there is a need to specify and point out the essay's errors. This debate is ongoing. A more marginal point relate to constraints within the methodology. An action research study on annotation was managed alongside this project by the principal researcher; the 'deviant' data undescribed in this report offered valuable insight into how the project changed the research team, all of whom said they would never mark in the same way again (insight gained from reading annotations from the sample of essay scripts). The last two points are limited by the report's word count and are explored in the marking workshops.

11. Reflection

For staff and students, findings did not portray either a fragmented or disputed perception but rather a consolidated range of views to how annotation could be performed or received. Simply, annotations should be helpful, not destructive. Annotations and their relationship to the contexts for which they are used should signify what and why something is being critiqued rather than just having a feedback opinion. As well as this being an epistemological consideration, the practicality of directly linking annotation to the area identified for feedback, needs far more recognition in terms of how it a vital device for signposting and entering into a discursive exchange with student's work. Whilst the use of annotation methods and feedback together might be viewed as complimentary, it is not an equitable relationship if annotation is viewed

negatively by students. Therefore, future training and support is important to annotation if it is to be performed well. For annotation to be practical and helpful to students it must signify meaning and lecturers must be confident in its usefulness for students' development. This is not so easy when the theory and practice of annotation is more complex and intricate than its definitions. However, this study has identified a number of helpful points to support effective annotation: sensitive comments, positive evaluations, reading as a believer, non imperative statements, purposefulness, visual impact and appropriateness. Ten points based on the literature reviewed and the findings from the questionnaire and focus group have been drawn-up to assist in the practice of good annotation and are listed below:

1. Treat work with respect
2. Ensure feedback and annotation is written with a helpful attitude and tone
3. Provide balanced comments by identifying good points and areas of weakness
4. Phrase some comments in the form of questions
5. Give an explanation and justification of grade / mark awarded
6. Give a clear indication of how the student could improve the work
7. Preferably write in margins in pencil – avoid using red ink
8. Keep comments to a minimum in the margins. If lengthy comments are needed then use a number in the margins and comment on these on these in the feedback sheet
9. A tick (✓) should be used to indicate aspects where marks are gained and should be placed as close as possible to where the mark has been awarded
10. Identify specific spelling, typographic, punctuation, grammatical and referencing errors by circling or underlining error.

References

- Brown, G., Bull, J., and P, Pendlebury (1997). *Assessing student learning in higher education*. London: Kogan Page.
- Derrida, J (1982). *Margins of Philosophy. Translation and Annotation*. (Ed., Alan Bass). Brighton: Harvester Press, 1982.
- Geer, J. (1991). Do open ended questions measure “salient” issues? *Public Opinion Quarterly*. 55, 360–370.
- Guba, E. G, and Y. S Lincoln (1994). Competing paradigms in qualitative research. In N. K. Denzin and Y. S. Lincoln (Eds). *Handbook of Qualitative Research*. London: Sage.
- Jenkins, J (2005). University of Salford Guidelines for the Annotation of Formative and Summative Assessments. School of Nursing.
- Kristeva, Julia. *Powers of Horror: An Essay on Abjection*. Trans. Leon S. Roudiez. New York: Columbia UP, 1982.
- Polit, D, and C. T Beck (2006). *Essentials of Nursing Research*. (6th ed.). Philadelphia: Lippincot Williams & Wilkins.
- Stephani, L (2005). “Assessment of Student Learning: promoting a scholarly approach.” *Learning and Teaching in Higher Education*. Issue 1, 51-66.
- Marshall, C. M (1998). Toward an ecology of hypertext annotation. *Hypertext. Proceedings of the ninth ACM conference on Hypertext and hypermedia*. June 20-24. Pittsburgh Pennsylvania, US. 40-49
- Urquhart, V and M. McIver (2005). Teaching Writing in the Content Areas. In *Association for Supervision and Curriculum Development*; Aurora, CO: Mid-continent Research for Education and Learning.

Wolfe, J. L (2002). Marginal Pedagogy: How Annotated Texts Affects Writing-From-Source Text. *Written Communication*. 19, 2, 297-333.

Wolfe, J. L and C. M. Nuewirth (2001). "From the Margins to the Centre: the future of annotation." *Journal of Business and Technical Communication*. Vol.15 No.3 333-371.

Wolfe, J. L (2000). Effects of Annotations on Student Readers and Writers. *Proceedings of the Fifth ACM Conference on Digital Libraries*. San Antonio: ACM Press.

TLQIS – Budget Proforma: Final Costs

	Details of Expenditure (e.g. equipment specifications)	Costs	Total Expenditure
Staffing	Academic lecturer B	£1200 70 hrs @ £28.00	£1960
Travel	Support	£1380 150hrs @ 12.50	£1875
Consumables	Office consumables (including presentation and binding)	£200	£200
Equipment	Discs and memory keys Tape recorder and tapes Books and literature	£100 £245 £240	£465
Other	Conference poster		£280
Totals			5000