LTC13D062

Title:	**The Future Use of Text-Matching Software at UEA**
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Issue

The future use of text-matching software at UEA.

Recommendations

The Text-Matching Software Working Group has produced a summary of Agreed Principles and Recommendations, which are set out below.

Following a review of Plagiarism & Collusion in 2012-13, a revised Policy was introduced for the 2013-14 academic year. Whilst the use of Turnitin was not considered under the review of Plagiarism & Collusion, there was recognition that review of the University's approach to Turnitin was required and LTC approval was sought and received for the above Working Group to be convened, led by Adam Longcroft. The Group was tasked with reviewing use of Turnitin to support the University's Plagiarism & Collusion Policy.

The Group was asked to consider the approach to Turnitin in the context of the following four broad areas:

1. Deterrence
2. Detection
3. Investigation
4. Turnitin as a formative tool

The Group has met three times during this academic year and, in its considerations of the above, has researched the use of Turnitin and alternative text-matching software tools in other HEIs. In addition, the Group has discussed the complexities and practicalities around the following:

- Managing cultural change within the institution
- Academic and administrative support - resourcing issues
- The role of Plagiarism Officers
- Increased workloads
- Training of staff and students
- Technical issues – coursework submission
- Alternative text-matching software solutions
- DPA issues

The Group has made significant progress in considering this complex issue. However, it was felt that uncertainty in a number of areas, both internal and external to the University, currently limits further progress, for example:

- ❖ Recent reputational damage to the Turnitin brand
- ❖ The imminent review of the University's Advisory System
- ❖ The need to consider assessment feedback
- ❖ The University's work on a collaborative project with IBM (a decision has subsequently been taken not to proceed further with this)
- ❖ Recognition that implementation of an agreed system would be a technical project requiring support from ISD Learning Technologists

In conclusion, the Group agreed that further work was required to ensure that an appropriate infrastructure was available to support wider use of any text-matching software.

However, the Group agreed a number of principles for consideration by LTC, summarised as follows:

- The benefits of wider use of TMS outweigh the drawbacks
- Use of text-matching software to be extended in order to safeguard the integrity of UEA awards and to assist students in making a successful transition to HE study in the UK
- Despite recent reputational problems, Turnitin is the dominant and accepted 'industry standard' and the University should continue its use
- An institutional-wide policy is preferable to variance across Faculties in order to ensure parity of treatment for students. However, student members were willing to accept the need for different approaches, should there be clear, justifiable academic rationale for this.
- The need for robust training for students and staff on the use of TMS software, including interpretation of originality/similarity reports. The need for both face-to-face and online training
- The need to mitigate the risk of academic complacency and safeguard against a disproportionate reliance on TMS for identifying potential plagiarism or collusion
- TMS to be made available to students as a formative self-check tool, prior to submission
- Specific arrangements would be needed for the use of TMS for PGR students
- Extended use of TMS should form only part of a wider University strategy on eliminating plagiarism and collusion – eg considerable focus on education, awareness, effective induction, referencing conventions, etc.
- Comprehensive screening of work should focus on first year modules, 1-year masters programmes and other key induction periods (eg direct entry to Year 2)
- Random/partial sampling should be used in subsequent study stages, for example the 5% sample strategy adopted by City College Norwich. Student members accepted this, provided students could use a formative self-checking tool. Any sampling system would have to be transparent to students and staff.
- Following approval of any new approach, introduction of a pilot in selected Schools, for example, MED, prior to full, institutional roll-out
- Any new policy will need to be clearly communicated to students and staff in a timely way

Next Steps

1. LTC to consider principles.
2. If principles are endorsed, raise with ISD the need for a project to expand the use of Turnitin across the University, to include self- and batch submission, integrated with the online coursework submission process.
3. This requirement should inform discussions relating to the development of an institutional online marking solution, regardless of whether the solution in question is a development of the current in-house process, or an 'off-the-shelf' solution provided by an external agency such as Blackboard.
4. Following development, the implementation would require appropriate resources and training for staff and students.

Resource Implications
- Training of staff and students in use of Turnitin – will require support from Learning Technologists, and development of online training materials (many are actually already available via Turnitin).
- Ensuring sufficient technical development resource is devoted to integration of use of Turnitin in institutional online marking solution.

Risk Implications
- Insufficient allocation of resource to effective development of technical infrastructure could result in poor implementation and use-friendliness for staff and students.
- Insufficient allocation of resource to training of staff and students could negatively impact o both groups.

Equality and Diversity

It is not envisaged that the recommendations and principles listed above would negatively impact on any protected groups.

Timing of decisions
It would be advantageous if the principles listed above could be endorsed by LTC in order that these subsequently inform development work in ISD on the institutional online marking solution.Ben Petley has set aside the necessary resource from end of May to end of Sept, so a decision by LTC now would be very timely.

Further Information
Contact Lynne Ward in LTS 592217 Lynne.Ward@uea.ac.uk

Background
Composition of Working Group on the 'Future Use of *Turnitin* at UEA'
Adam Longcroft (ADTP) (Chair)
Lynne Ward (LTS)
Mel Steele (PGR Office)
Gill Price (MED)
Marion Wilson (NSC)
Sarah Allen (NBS)
Julie Barrau (HIS)
Parvadha Suntharalingam (ENV)
Jeremy Schildt (DOS)
Louise Withers-Green (SU Academic Officer)
Hannah Jackson (Partnerships)
Christina Malcolmson (INTO, LDN) & Sarah McKenzie (INTO, LDN)
Bill Horncastle (INTO, UEA)

Fern Farr (City College Norwich)

Meetings of the Working Group
The Working Group will meet as follows
- Monday 21 October: 12.00 – 13.30 (REG CR1)
- Tuesday 19 November: 12.15 – 13.45 (REG CR1)
- Thursday 05 December: 15.30 – 17.00 (REG CR1)

The Review of Plagiarism & Collusion Policy (March-June 2013)
Earlier this year (Jan-June 2013) a working group, chaired by the ADTP, reviewed the P & C Policy. Their deliberations resulted in a revised Policy for 2013/14. No changes were made to the use of Turnitin since these would have massive implications for our systems, which would need to be developed to support it. The ADTP indicated, however, that he would ask LTC to empower a Working Group to review the future use of text-matching software and LTC endorsed this in June 2013.

Some background on TMS
We are not alone at UEA in reviewing the way we utilize text-matching software in relation to the submission of formative and summative work, and in relation to policies on plagiarism and collusion. As our relationship with students changes within the sector, and as cases of plagiarism/collusion increasingly exercise HEIs concerned about the integrity of awards (a particular concern in the health professions where public safety is a key concern), universities are looking afresh at their policies and practices so that they are both clear, robust, fair and easy to manage.

Estimates of HEI use of Turnitin vary. Some reports state that 80% of UK HEIs now use *Turnitin* in one way or another. *Turnitin* is actually now used in many different ways in HE institutions. In some it is used as at UEA, but in others is used to scan all coursework submissions, or a sample of coursework submissions, or is 'targeted' at certain modules, or types of coursework etc. In some Universities, students are empowered to submit their work to *Turnitin* prior to submission as a 'check' and as part of a learning strategy. *Turnitin*, like all text-matching software of this kind, has significant limitations and many colleagues have pedagogical or moral objections to its wider use. This is a very complex field and the implications of changing the way we use *Turnitin* at UEA could be very significant indeed, both for staff, students and our systems. For example, this might have significant consequences regarding training for staff and students. Turnitin, after all, cannot determine whether a student has plagiarised – only academic staff are able to make this judgment.

Some of our institutional partners already use Turnitin in different ways to our practice at UEA. For example:

INTO London
INTO London use Turnitin as an educational tool, with students submitting work through the system themselves. The students get to see their own report and can resubmit after amending. The International students especially learn from this as the referencing required in the UK is often very different from home. The teaching staff go through the reports with the students to help them understand and interpret them. The teaching staff get students to follow the correct way of working rather than just asking them to rework small parts. All work is formally submitted by INTO via Turnitin; there is no other option. This means all students receive a Turnitin report and all work is subjected to checking via Turnitin. This

includes formative assessment. In every case the teaching staff give their own feedback on coursework, as we would at UEA.

City College Norwich (CCN)
CCN submit a 5% sample of student work to Turnitin. The value of Turnitin is that it is objective, it doesn't make decisions and that it also turns up areas which academic colleagues couldn't possibly know about such as previous student essays. Unlike INTO, CCN do not allow students to have access to Turnitin. CCN has switched of the part of the system that enables students to submit their own work for report, as they believe it teaches people to cheat the system. Those in the sample at CCN are used as guide to show the student what the lecturer will see. This shows that that there may be high percentage score but this does not necessarily mean work has been plagiarized. The staff still have to make an academic judgment on the value or integrity of the work based on the Turnitin report.

Benefits to widening/extending the use of text-matching software
- The most compelling argument is that it is most effective way of ensuring the integrity of awards. If students cheat they do not learn.
- When academic staff are not teaching to their own area of research they don't always know all the material. Therefore infringements can be missed. Turnitin does solve a lot of that.
- Extended use could motivate staff more as, at the moment, they do not feel fully supported to detect plagiarism/collusion.
- Reports could be used as feedback to markers too.

However, some concerns:
- There is little consensus in PGR circles in sector on wider use of Turnitin or other software solutions.
- Turnitin and other solutions are used routinely in many other HEIs, but this doesn't mean they identify or prosecute more cases than UEA.
- Use of text-matching software may not act as an effective deterrent.

Some questions the Working Group considered:

Deterrence, detection, investigation or use as formative student learning tool?
Text-matching software like Turnitin can be used in a number of ways. Which would the working groups favour?

Deterrence?
The software is used to scan 'samples' of student work, or all student submissions. The fact that a student's work might be in the sample, or will be subjected to scrutiny by Turnitin, provides a 'deterrent' effect and dissuades students from attempting to plagiarise. Whilst this use of text-matching software is widespread, it remains unclear just how effective it is as a strategy. Would we want to see text-matching software being used as a 'deterrent'?

Detection?
The software is used to scan 'samples' of student work, or all student submissions. Use of the software normally results in a short-term 'spike' in the number of detected cases of plagiarism/collusion, with student behavior changing thereafter. Would we wish to see text-matching software used to detect plagiarism, either via a 'sample' or by having all student work submitted via Turnitin for example?

Investigation?
This is how we use Turnitin at present at UEA. Once a marker has raised concerns and drawn evidence of possible plagiarism to the attention of the PO, the PO then runs a Turnitin report on the script in question and uses this to inform their judgment. Are we happy to see this practice continue?

Formative tool?
Many HEIs allow students to use Turnitin or its equivalent as a formative learning tool – they submit drafts of their work to Turnitin prior to submission and thereby learn how to avoid plagiarism and to cite work in an appropriate fashion. The 'jury is out' on whether this kind of use of text-matching software has a beneficial impact on students' practice, but is enthusiastically supported by some academics.

What use of text-matching software (e.g. Turnitin) exists in other HEIs?
Recommendation:
- Should each member of the Working Group investigate/research what text-matching software solutions are being used in other Russell Group and '94 Group HEIs, and share insights into how they are being used. Secretary to allocate a HEI to each group member? Should this involve no more than 1-2 hours staff time?
- What should Research focus on? How about the following Qs?:
  - What text-matching software is used?
  - Is all work submitted to software, or just a sample? Or just used to investigate suspected cases (as at UEA)?
  - Are students allowed to pre-submit their own work to text-matching software?
  - Who submits the script/submission to software prior to formal submission – student or staff?
  - Or is script submitted to software as part of the formal submission process?
  - Who runs-off the report?
  - Who interprets the report?
  - What role do markers play in the process, and POs?
  - What training is provided to students on text-matching software?
  - What training is provided to staff on text-matching software?

Academic buy-in
- There are disincentives in terms of markers identifying plagiarism cases and reporting them to Plagiarism Officers – e.g. the time it takes it investigating and conducting the Plagiarism Meeting with the student, with the preparation for it and paperwork afterwards. This probably depresses detection rates. How can this be addressed in terms of a revised policy on use of text-matching software? Would extending us of software address the root cause which is lack of incentive?
- Increase in marker workload - Where the cohorts are very large, we may face resistance if changes to use of text-matching software result in increase in staff time in the marking process, or follow-up in cases where plagiarism is detected and drawn to attention of the school PO. How can this be managed?
- Staff resource issues - someone still has to interpret the reports – who should this be? There would also be the issue of who would run them through the software. Who should this be?
- Increase in PO workload – if we use text-matching software more widely (e.g. for a sample or for all submitted work) then number of Plagiarism cases detected is likely

to increase. Should all schools have a Deputy PO to spread the load, or 2-3 deputy POs? Other solutions?

- Promotion - Markers could mention their involvement in P & C cases in appraisals and when applying for promotion. There may be a danger of 'point scoring' but we need something to recognize extra time taken to uphold quality. Other solutions?
- Markers at the heart of the system - In some other HEIs which have introduced extended use of text-matching software, it has resulted in perception that markers were abandoning their close monitoring of P & C in the marking process. How can we avoid this at UEA?

Case for 'piloting' extended use of text-matching software vs institution-wide roll-out

The case for a 'pilot' approach:
- We would have an opportunity to learn from a pilot and 'iron-out' any wrinkles prior to roll-out across all Schools.
- We would be able to explore more than one software solution (e.g. Turnitin, Blackboard/SITS and others) in parallel and establish which works best and is easier to implement.
- It would allow more time to investigate other solutions already in use in other HEIs.
- It would allow more time to ensure that UEA systems were properly configured prior to roll-out.
- It would allow more time to develop clear insights into staff resource and staff workload implications prior to roll-out.
- It would allow more time for discussion/consultation with our students, and with our staff.
- However, piloting would mean treating students differently which could in turn raise problems.

A pilot approach could focus on:
- We could require all work submitted in year 1 of a three year course and then move to the sample approach afterwards (Years 2-3, 4, 5)?
- Perhaps just specific exercises could be identified?
- A pilot on 2-3 courses in each faculty with 1st years? This would form part of a supportive framework where students can reflect on practice.
- Key Ist Year modules – helping to develop a raised awareness of P & C amongst first year students.
- Integrated approach with 1st year PAL sessions – with sessions focusing on P & C. We could have mentors working with the students within their group, looking at the reports.

Student self-submission to text-matching software
- It is relatively easy for students to self-check their work using resources on the WWW - Students often do this already using Google and other free text-matching solutions.
- Should students be allowed to formally submit their own work via institutional text-matching software?
- There are many other HEI's (e.g. Oxford Brookes) that do allow students to submit their work via Turnitin prior to formal submission. A UEA we do not allow this. Benefits of this approach have been highlighted elsewhere in sector in terms of developing student awareness of P & C, and enhancing their use of appropriate academic citation methods – do the benefits outweigh the risks?

- For less experienced students (i.e. no prior UKHE experience), it is asking a lot of them to make informed decisions based on the Turnitin reports. If academics find it difficult to interpret the Turnitin reports, how would students manage? Is it just helping the students to paraphrase /cheat better?
- It is important not to let students think that Turnitin is finding plagiarism as all it does is text match. Turnitin does not prove plagiarism, it is just a text matching tool and it can be highly flawed. The only persons that can make a judgment are suitably trained POs.

Training for staff & students
If we recommended major changes to the use of text-matching software, there would be significant implications for staff and student induction/training.
- What kind of student induction would be needed?
- What kind of staff training would be most effective/efficient?
- There is a 'toolkit' for teaching with Turnitin produced by Canterbury University. It might be worth looking at different packages and toolkits available?
- Oxford Brookes University use the following YouTube clip (and other resources) to provide guidance for students on the interpretation of their Turnitin reports: http://m.youtube.com/watch?v=1yYf8AihndI
- Should our own training focus on in-house materials or buying-in well-tried and trusted resources from elsewhere?

Use of Turnitin in other HEIs

Lancaster
After consultation with departments around the University, LTG identified 3 uses for Turnitin, and have documented all 3 for use at the University.
1. Single upload of a suspicious essay to create a report to produce evidence for poor referencing or possible plagiarism.
2. Bulk upload of all essays from courses to act as a deterrent against plagiarism.
3. Student upload of their own essays, with provision for them to see their own work and re-submit, as part of an endeavour to help students write good essays.
http://www.lancaster.ac.uk/celt/celtweb/files/Intro_Turnitin_09_V_2.0a.ppt

Kent
Turnitin is used primarily as a 'formative tool' to promote student awareness of good academic practice.
http://www.lancaster.ac.uk/celt/celtweb/files/Case%20Study%20Kent%20University%20-%20Turnitin%20as%20formative%20tool.pdf

Leicester
Guidance on Turnitin at Leicester Univ. Leicester does not allow students to check their own work using Turnitin.
http://www2.le.ac.uk/offices/ithelp/services/blackboard/assignments-and-grades/turnitin/set-up-and-manage/re-check-originality

Durham
Durham uses Turnitin. Students upload their own scripts to Turnitin at the point of submission. Guidance provided to students can be found here:
http://www.dur.ac.uk/lt.team/help/index.php/turnitin-faq-for-students/

Essex
Variable practice. Essex allows some students on some courses to submit their work to Turnitin. Guidance pages for students can be found here:
http://www.essex.ac.uk/plagiarism/turnitin.html

Newcastle
Newcastle require students to self-submit their work to Turnitin. They have to attach the Turnitin report to their coursework submissions.
http://www.ncl.ac.uk/historical/students/teachingandlearning/turnitin.htm

Leeds
Variable practice. Staff are free to determine whether they want to use Turnitin and how they want to use it. Staff can also use Grademark tool if they wish to for marking and feedback. Turnitin guidance for staff at Leeds can be found here:
http://www.leeds.ac.uk/vle/staff/assess/turnitin/

Coventry
Turnitin case study from Coventry. Introduced across all schools in 2006-7 and then used, as a formative tool, to allow students to develop their writing from 2007-8.
http://www.english.heacademy.ac.uk/explore/publications/casestudies/assess/turnitin.php
Sheffield
Sheffield practice is variable. Some schools submit work, whilst others require students to submit to Turnitin. Some kind of submission to Turnitin is the norm.
http://www.shef.ac.uk/lets/design/unfair/turnitin

Anglia Ruskin University
ARU use Turnitin primarily as a tool for students to reflect on their own work, as a formative tool.
http://web.anglia.ac.uk/anet/students/turnitin/

Plymouth University
Plymouth use Turnitin as a formative tool only.
http://technologyenhancedlearning.net/tel-initiatives/plagiarism/

Southampton University
Some, but not all, departments use Turnitin accessed via Blackboard. In some, it is used only as a 'formative tool' for students to check their own work.
http://www.southampton.ac.uk/isolutions/computing/elearn/blackboard/esub/turnitinuk.html

University of Surrey
Variable practice. Only a small group of academic staff appear to be using Turnitin at Surrey. Surrey guidance on Originality checks, Grademark and Peer mark services via Turnitin can be found here:
http://www.surrey.ac.uk/cead/telt/technologies/turnitin/

Teesside
Teesside allows students to check their work using Turnitin as a 'formative tool'. University guidance on interpreting Turnitin reports can be found here:
https://eat.scm.tees.ac.uk/bb8content/resources/recipes/interpretTurnitin.pdf

University of Cumbria
Cumbria allows both students and staff to submit assignments to Turnitin.
http://www.cumbria.ac.uk/StudentLife/Learning/ITMedia/ITSystems/TurnItIn.aspx

Cambridge University
Variable practice. Cambridge allows variable use of Turnitin for deterrence, for detection and as a formative tool.
http://www.admin.cam.ac.uk/univ/plagiarism/examiners/policy.pdf

Exeter
Exeter allows Turnitin to be used both as a formative tool and in detection.
http://as.exeter.ac.uk/support/staffdevelopment/aspectsofacademicpractice/assessmentandfeedback/academichonestyandplagiarism/turnitin-moreinformation/