

Advance student writing skills with a web browser and student texts

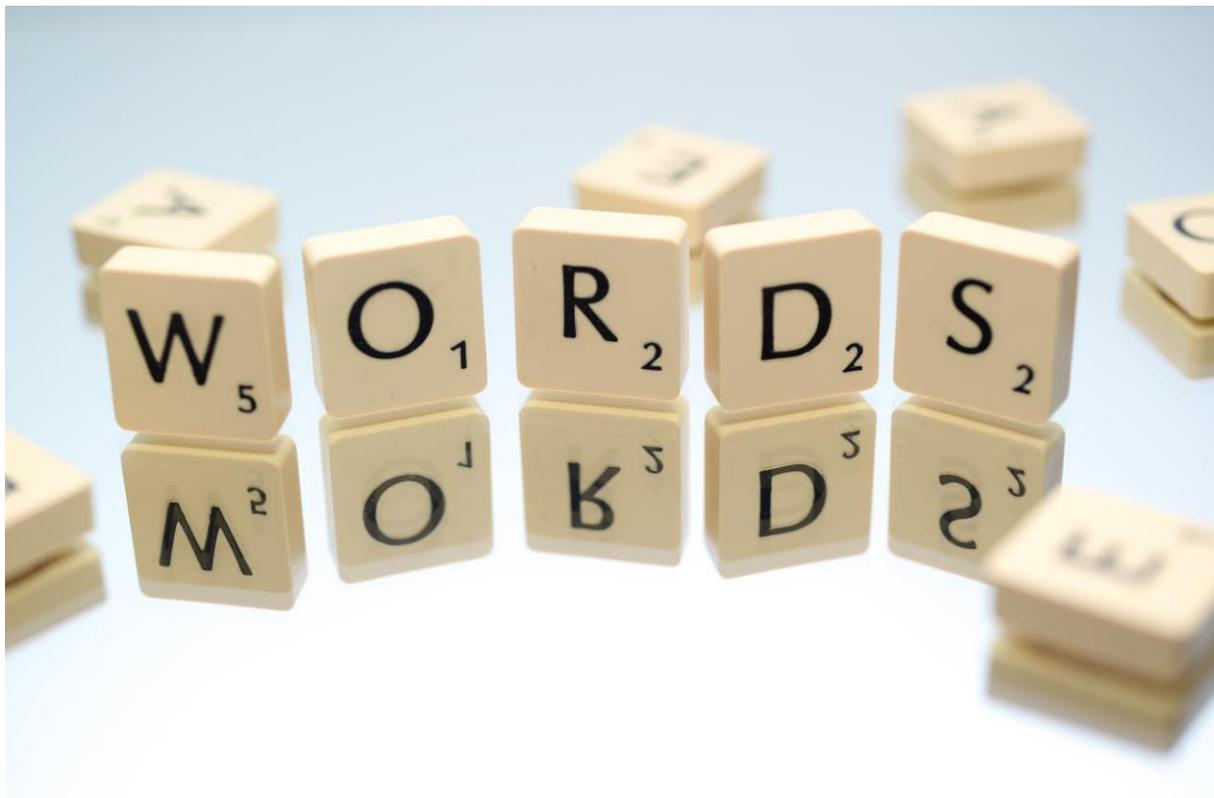


“Scribo amplifies the impact humanities teachers have on building student writing skills. The best news is that Scribo helps teachers do this in less time and with more insights than ever before”

Mark Stanley CEO Literatu

“Good writing is clear thinking made visible.”

Lidija Loridon CTO Literatu, (and Albert Einstein)



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EXECUTIVE SUMMARY

Most English and humanities teacher across K-12 are familiar with the term 'bag of words'. The sheer volume of digital and printed texts that teachers manage, grade and give feedback for is staggering. In our research journey, we met over 100 English and humanities-based 7 - 12 teachers, every one of them working at least 10 -15 extra hours per week.

Feedback, review, drafting and grading all consume teachers time and resources that are better used for remediation and tailored teaching. Put another way, it's taking teachers an additional 25% of a full time equivalent just to keep up with current workloads. Every way you look at it, English

and humanities teachers are spending too many hours supporting their current processes. Technology needs to better support English and humanities teachers with faster insights and more efficient processes.

Many teachers in our research group grade over 2400 texts per year, each reading over two million words. Teachers expressed the frustration of the overly manual processes they go through. Lacking time and support to build clear insights into cohort and student needs, most teachers follow up with students with memory and a single gradebook score.

We believe it is an understatement to say that technology has ignored English and humanities teachers. Since Microsoft and Google built functionality to add comments in documents there have been few significant improvements in text analysis, certainly even less in the context of teacher text-grading and data analysis. With an incalculable number of characters per second sent to digital storage by learners every second, most text is still processed cognitively, through human touch, voice, eyes and minds.

Until recent advancements in scalable cloud computing, the lack of computing power has been a significant restriction to processing vast amounts of text, even though many of the core algorithms were created some 30 years ago. Coupled with a new democratised access to previously proprietary data mining functions and libraries, the ability for software to process text has opened. Cloud based

"Since making live comments in Word and Google docs became main stream, it is an understatement to say that technology has ignored English and humanities teachers ever since."

artificial intelligence (AI) platforms are capable resources, able to impact and re-define everyday processes across all industries. This technology is deployed in many workplaces to perform a range of analytical and interpretive functions currently the job of human intelligence. Interestingly, the late Stephen Hawking re-cast the acronym AI to mean Assistive Intelligence, believing the word artificial to be just that. So far, Prof. Hawking is correct. Hawking believed that when human bias is excluded from machine-based intelligence, intelligence will morph into being artificial. Like Hawking, we believe that assistive intelligence gives everyone the ability to create more value with less effort. Another famous quote of Hawking says it all, “Intelligence is the ability to adapt to change.”

The capability for assistive intelligence software to process and analyse text is well advanced. Millions of words can be read and analysed in nano-seconds building analytic insights for diverse ranges of stakeholders and audiences. AI technology lies at the processing heart of what *Scribo* has brought to the K-12 English and humanities learning space. We have taken great interest in the recent collision between computer text grading capabilities and English teachers against its use. For the record, we believe teachers are right to doubt computers matching the cognitive grading and interpretive abilities of humans. Today’s computer algorithms have no cognitive ability and until they do, they will not do as good a job at grading texts and building interpretive feedback, as humans. The technology is assistive at best. This conversation does not in any way overrun or detract from the many assistive insights AI technology can provide teachers and students. We believe teachers should pursue every opportunity to let software do more for them, to process and summarise texts for their cognitive oversight, quicker than ever before. *Scribo* implements all that AI can offer English and humanities teachers, opening more time for teachers to add the value only they can.

Scribo gives teachers and students complete access to significant AI capabilities, simply to help them do their job. *Scribo* helps teachers improve and grow writing skills from insights built in a fraction of the time they spend now with relentless reliability and accuracy. Students have insights into where they should focus and seek mentoring quicker than ever before.

Scribo is accelerating what is possible as fast as AI boundaries are extended. Join us on this journey! We see no reason why teachers should not embrace the available power of computing intelligence to give them back what they all want; Clear insight into **Who** needs to know **What** with more time to teach **How**.

SCRIBO - THE NEXT GENERATION TEXT EVALUATION PLATFORM

SCRIBO - ORIGIN & HISTORY (ADAPTATION)

From Proto-Indo-European *skreybʰ-. Cognates include Ancient Greek [σκάριφος](#) (*skariphos*). An advanced AI based application allowing teachers to quickly assess and gain insights into writing skills for any level of writing, for any English and humanities text based subject submission. SCRIBO is the first "writing teaching tool" for the analytics era designed to improve student writing skills through continuous assessment and feedback from teachers using powerful AI capabilities. SCRIBO saves each humanities teacher at least 7 hours of assessment and feedback time and over 3 hours lesson planning and preparation a week.

Pronunciation

- (Classical): IPA: /'skri.bo:/

VERB

1. I write, I author

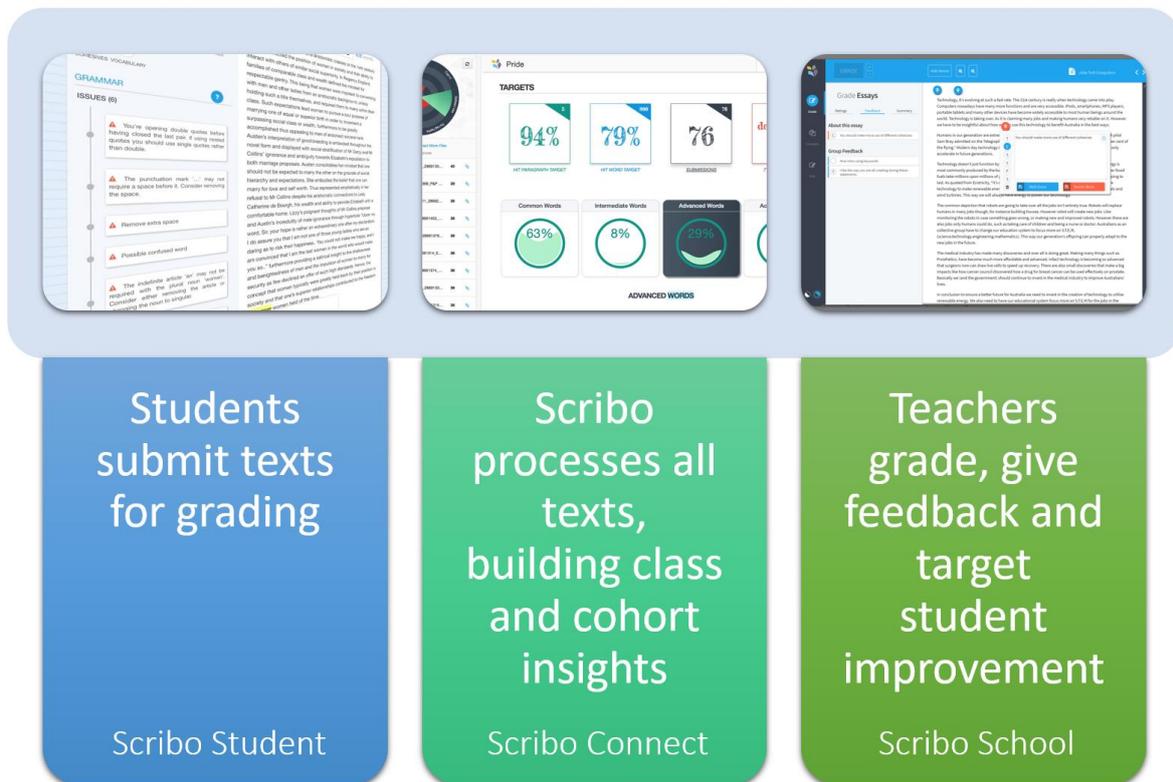
SCRIBO APPROACH

Using the best AI technology available, Scribo is a highly scalable digital assistant for every humanities and English teacher. Looking at where the platform fits into a school ecosystem, it is important to recognise that Scribo uniquely does not require an investment of more time, data or resources from teachers to be 100% effective. Scribo delivers results with minimal teacher involvement and has been developed with this intention.

All inputs to Scribo are existing student created digital texts, files that are already in a digital format, most times residing on a school cloud file system somewhere. Without these digital texts, there would be no student work product for teachers to grade.

Students create their text response content in existing digital tools such as Google Docs, Word and other text processing capabilities that export to PDF format. These documents form the base inputs to Scribo.

SCRIBO SPANS THREE LEVELS OF WORKFLOW

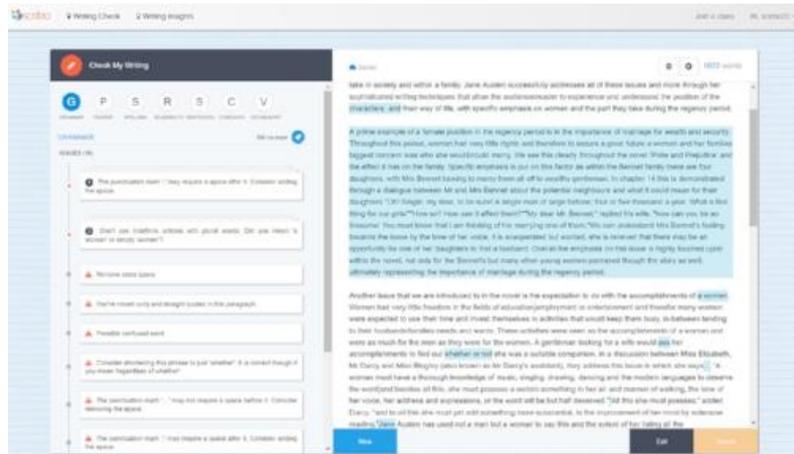


SCRIBO STUDENT

Scribo Student is a school wide resource giving students access to a comprehensive writing check across any extended text response. Linked to powerful AI services, student feedback is instant and accurate.

Scribo Student runs an on-demand seven point writing check, reporting writing issues and concerns across:

- Grammar
- Spelling
- Passive voice
- Vocabulary
- Readability
- Sentence structure
- Cohesive use



Students make corrections in situ, access context-aware online help and writing tips. Every time students activate the Writing Check, diagnostic data is gathered. Teachers and students have immediate access to detailed metrics on where students need the most help and where Scribo is supporting students with feedback.

Teachers have access the same student analysis tools, able to replicate writing checks on student work to gain further insights into the same identified opportunities for improvement. Scribo Student can be a standalone resource for the entire school, offered exclusively to students as an additional, school sponsored resource.

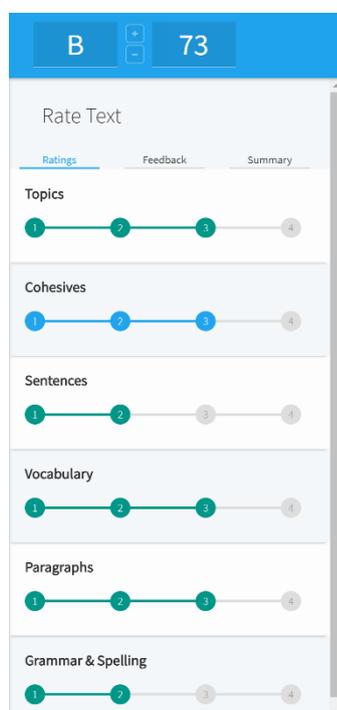
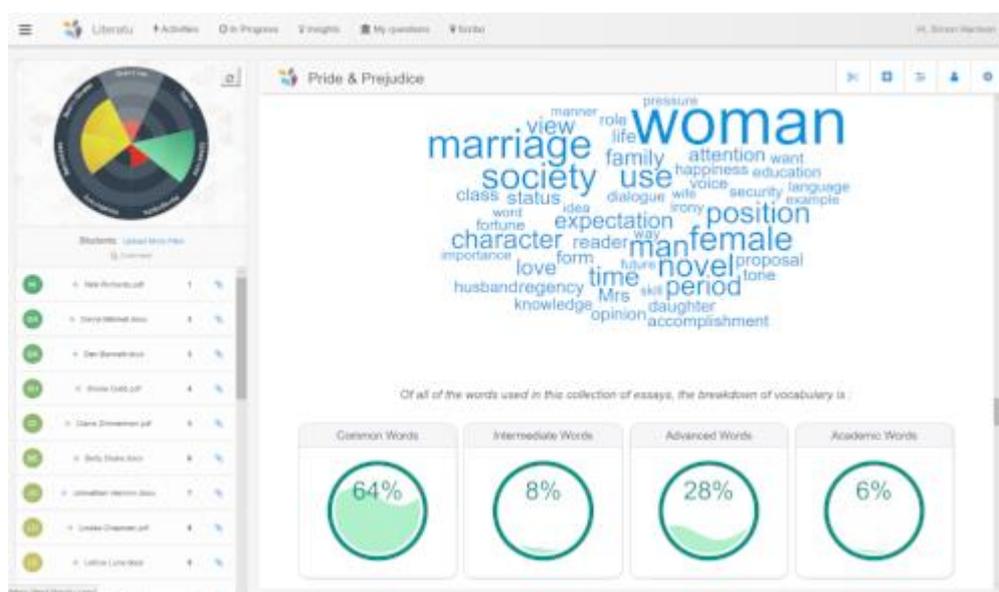
SCRIBO CONNECT

Scribo Connect is the artificial intelligence learning engine that imports and analyses all genres of student texts. Before teachers even start reviewing student drafts and submissions, Scribo has read every word. Integrated with O365 and Google, Scribo connect requires no additional work from teachers to start the analysis.

Scribo Connect:

- builds comprehensive analyses from all student texts
- blends data and discoveries into live insights for the class and individual students
- suggests where to improve student writing across six insight categories
- allows teachers to grade, compare, summarise and deliver direct fast feedback online
- creates a range of writing analytics, built from a full analysis of student text submissions
- auto sends feedback reports to students
- tracks growth and opportunities for improvement across levels of writing
- rolls up data from student, class, subject and year levels for consolidated discussions, teaching and resource planning.

Scribo quickly becomes every teachers' assistant, helping to reduce grading time, optimise feedback and track improvement across student writing skills. Scribo Connect can be run as standalone resource for teachers.



Uniquely, Scribo tracks improvement in student writing across a combined 6-point analysis matrix. Machine learning calculates the levels of student rating compared to the current cohort the student is writing in.

This helps teachers understand the levels of ability across the class while tracking the unique talents of each student. Teachers override any recommended level Scribo calculates, not only adjusting the level rating but also teaching Scribo the preference of the teacher. An assistant that learns on the job, is a good assistant.

All levels are quartile based, designed to quickly group students into focus groups for additional mentoring. Aggregated levels across the cohort build a consolidated cohort radar. The radar draws attention to the skill category that is impacting overall cohort writing results.

All grading levels are completely flexible. Only teachers allocate the final grade.

Long format

Rubric Marking ON

Mark	Feedback	Summary
Spelling Show Description		
4	Above Standards	
3	Meets Standards	
2	Approaching Standards	
1	Below Standards	
Punctuation		
4	Above Standards	
3	Meets Standards	
2	Approaching Standards	
1	Below Standards	
Grammar		
4	Above Standards	
3	Meets Standards	
2	Approaching Standards	
1	Below Standards	

If required, teachers use their own rubric based marking guides to grade texts. Analysis is then across two levels, rated values and the preferred rubric scores of each teacher.

All rubric category scores are consolidated in a normalised reporting format. Teachers have unlimited ability to track and record feedback for students and the cohort.

The screenshot shows a web browser window with the URL <https://www.literatu.com/essays/#/report/A4fGec1bJQq2RHfY>. The page title is 'Rate Text'. The interface is divided into several sections:

- Rate Text:** A section with a 'Summary' tab and a 'Feedback' section. The feedback section has a 'Well Done' button (highlighted in blue) and a 'Needs Work' button (highlighted in red).
- Text Content:** The main text being analyzed is an essay about Jane Austen's 'Pride and Prejudice', discussing women's position and role during the Regency period, social decorum, and marriage proposals.
- Navigation:** A sidebar on the left contains icons for 'Create', 'Compose', 'Edit', 'Check', and 'Report'.

SCRIBO SCHOOL

Scribo School joins Scribo Student and Scribo Connect as a consolidated capability. The platform joins teachers and students across the school in a closed loop of feedback, insights, analytics and opportunities to grow writing skills.

Students access consistent feedback and guidance, teachers scale their capabilities past the reach of the classroom and current time constraints. Scribo Student and Scribo Connect join forces when teachers are ready to maximise a powerful single suite.

Scribo School is a powerful text improvement and analysis platform helping K-12 humanities teachers and students improve English writing skills simply by knowing who needs what help.

SCRIBO DATA

Key insights into writing skills at both student and cohort level are made visible to teachers, leaders and students via *Scribo*. With a full processing ability of over 1000 words a second, *Scribo* not only analyses every word of a text submission but collects critical data elements, patterns and insights across all texts at many levels.

Driven by AI and machine learning, Scribo's core mission is to support teachers, certainly not replace them. Hawking was right to refer to Artificial Intelligence as Assistive Intelligence because that is where we are at right now. AI however is capable of repeating structured and unstructured tasks at elevated levels of accuracy, tirelessly.

Having said this, there is so much assistance that technology can offer teachers and students. We believe it is time to let software do what software can to support teachers doing what only teachers can. Assistive intelligence is what Scribo opens to every English and humanities teacher simply by feeding student text submissions into the analysis engine.

The most significant AI capabilities and platform services available underpin Scribo. From IBM Watson to Microsoft AI to Google AI, Scribo adds value alongside very powerful platforms to process existing digital student data. The mission of Scribo was to ensure teachers and students could get immediate benefit and feedback without additional work. Students writing texts have immediate access to AI support. Teachers have the same immediate access to AI support at more detailed levels of analysis generated from the same corpus of text created and checked by students.

The connection and coupling of teacher and student workflows is what makes Scribo a powerful and immediate assistant for teachers and students.

INTEGRATION

Scribo is deployed on the Literatu Assessment platform. As such Scribo integrates with O365 and Google, giving schools an integration that does not duplicate core access and security points in their infrastructure. Integration with other management platforms such as SIS and LMS environments is also supported.



SCRIBO SUPPORTS A FULLY FUNCTIONAL 7 DAY TRIAL.

GO TO : WWW.SCRIBO.EDUCATION FOR MORE
INFORMATION.