

# Appropriate Monitoring for Schools

June 2016



## Provider Checklist Responses

Schools in England (and Wales) are required “to ensure children are safe from terrorist and extremist material when accessing the internet in school, including by establishing appropriate levels of filtering”<sup>1</sup>. Furthermore, the Department for Education published the revised statutory guidance ‘Keeping Children Safe in Education’<sup>2</sup> in May 2016 (and active from 5<sup>th</sup> September 2016) for schools and colleges in England. Amongst the revisions, schools are obligated to “ensure appropriate filters and appropriate monitoring systems are in place. Children should not be able to access harmful or inappropriate material from the school or colleges IT system” however, schools will need to “be careful that “over blocking” does not lead to unreasonable restrictions as to what children can be taught with regards to online teaching and safeguarding.”

By completing all fields and returning to UK Safer Internet Centre ([enquiries@saferinternet.org.uk](mailto:enquiries@saferinternet.org.uk)), the aim of this document is to help monitoring providers to illustrate to schools how their particular technology system(s) meets the national defined ‘appropriate monitoring’ standards. Fully completed forms will be hosted on the UK Safer Internet Centre website alongside the definitions

The results will help schools better assess, in conjunction with their completed risk assessment, if the monitoring system is ‘appropriate’ for them.

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Filtering System	Impero Education Pro (monitoring)
Date of assessment	July 2016

### System Rating response

Where a supplier is able to confirm that their service fully meets the issue identified in a specific checklist the appropriate self-certification colour for that question is GREEN.



<sup>1</sup> Revised Prevent Duty Guidance: for England and Wales, 2015, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/445977/3799\\_Revised\\_Prevent\\_Duty\\_Guidance\\_England\\_Wales\\_V2-Interactive.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/445977/3799_Revised_Prevent_Duty_Guidance_England_Wales_V2-Interactive.pdf)

<sup>2</sup> <https://www.gov.uk/government/publications/keeping-children-safe-in-education--2>

Where a supplier is not able to confirm that their service fully meets the issue identified in a specific checklist question the appropriate self-certification colour for that question is AMBER.



## Monitoring Content

Monitoring providers should ensure that they:

Aspect	Rating	Explanation
<ul style="list-style-type: none"> <li>Are IWF members</li> </ul>		<p>Impero is a member of IWF and has been since 2013.</p> <p><a href="https://www.iwf.org.uk/members/current-members">https://www.iwf.org.uk/members/current-members</a></p>
<ul style="list-style-type: none"> <li>Work with CTIRU 'the police assessed list of unlawful terrorist content, produced on behalf of the Home Office'</li> </ul>		<p>Impero has been working with CTIRU since June 2016.</p>

## Inappropriate Online Content

Monitoring providers should both confirm, and describe how, their system monitors/manages the following content

Content	Explanatory notes – Content that:	Rating	Explanation
Illegal	Content that is illegal, for example child abuse images and unlawful terrorist content		<p>Impero Education Pro contains dedicated sets of keyword algorithms that help to identify users who may be engaged in illegal behaviour relating to the searching, distributing or viewing of child abuse images and/or unlawful terrorist content.</p> <p>In relation to child abuse images, the keyword algorithms include specialist terms provided by the Internet Watch Foundation (IWF). These terms are also supplemented with Impero's own research in relation to terminology young people may use in relation to sharing sexual images of themselves online.</p> <p>In relation to unlawful terrorist content, the counter radicalisation and illegal content keyword algorithms include specialist terms provided by a variety of counter extremist and charitable organisations that work at a community level to help reduce race and religious hatred, as well as information</p>

		<p>from the UK proscribed list of terrorist organisations and the US FTO designated lists.</p> <p>Examples of types of terms used in these algorithms include names of known violent extremist organisations, names of their associated media outlets, and titles of known violent extremist publications/propaganda materials.</p>
Bullying	Involve the repeated use of force, threat or coercion to abuse, intimidate or aggressively dominate others	<p>Impero Education Pro contains dedicated sets of keyword algorithms that help to identify children who may be engaging in bullying behaviour, either as a bystander or a perpetrator, or help identify a target of such behaviour.</p> <p>The keyword algorithms include phrases relating to bullying behaviours, such as the use of derogatory language based on race, religion, gender, disability, physical appearance and sexuality. Terms relating to name-calling, and threats of violence or put downs are also included. They also include references to people that may be victims of bullying and who are attempting to stop such actions or expressing feelings of being hurt, upset, depression or suicide.</p> <p>Algorithms are created in conjunction with UK and international charities, such as the Anti-Bullying Alliance, iKeepSafe and Hey U.G.L.Y. Impero has also included input from children and young people gathered through focus group work carried out in schools with pupils.</p>

<p>Child Sexual Exploitation</p>	<p>Is encouraging the child into a coercive/manipulative sexual relationship. This may include encouragement to meet</p>		<p>Impero Education Pro contains dedicated sets of keyword algorithms that help to identify children who may be engaging in risky or inappropriate sexual behaviour online, communicating with strangers , or being coerced into doing something against their wishes.</p> <p>It also helps identify those who may be searching for child sexual abuse content</p>
<p>Discrimination</p>	<p>Promotes the unjust or prejudicial treatment of people on the grounds of race, religion, age, sex, disability or gender identity</p>		<p>Impero Education Pro contains dedicated sets of keyword algorithms that help to identify children who may be engaging in discriminatory behaviour or who may hold extreme or intolerant views (in relation to race, religion, gender, disability or a person’s sexual orientation).</p> <p>The keyword algorithms include phrases relating to bullying behaviour, common language associated with race and religious hatred, and derogatory language used in relation to the LGBT community.</p> <p>Algorithms are devised in conjunction with input from UK and international charities such as the Anti-Bullying Alliance, Hey U.G.L.Y, HOPE not hate, and iKeepSafe, as well as input from children and young people obtained through focus group work carried out in schools with pupils.</p>

<p>Drugs / Substance abuse</p>	<p>displays or promotes the illegal use of drugs or substances</p>	<p>*</p>	<p>Impero Education Pro contains a dedicated set of keyword algorithms around the area of drug and substance misuse* that helps to identify children that may be engaging in drug use, proactively searching for information on drugs, or talking about drug use in school.</p> <p>The keyword algorithms include common, variant and slang names of known drugs and legal highs, as well as phrases that may indicate the taking of such substances.</p> <p>In addition, each keyword describing a drug name includes an explanation outlining its alternate names, the effects it can have, and its UK and US legal classification.</p>
<p>Extremism</p>	<p>promotes terrorism and terrorist ideologies, violence or intolerance</p>		<p>Impero Education Pro contains a dedicated set of keyword algorithms that help to identify children who may be seeking information and/or sharing tips/advice relating to extreme or intolerant views or ideologies, or engaging with others that may hold extreme or intolerant views or ideologies, relating to race, religion, or a person's sexuality. It also detects on references to the use of weapons and violence.</p> <p>These keyword algorithms have been developed in conjunction with a variety of specialist organisations ranging from a think tank specialising in countering extremism and terrorism, to charitable organisations that work at a community level to help reduce racial and religious hatred. The keyword algorithms also contain input from specialist</p>

			<p>safeguarding trainers who deliver Prevent training courses to schools and information from the UK proscribed list of terrorist organisations and the US FTO designated lists.</p> <p>Algorithms also include terms in Arabic.</p>
Pornography	displays sexual acts or explicit images		<p>Impero Education Pro contains a dedicated set of keyword algorithms around the area of adult content. This helps to identify children who may be proactively searching for, or sharing, pornographic images or videos. It also helps to identify children who may be introducing adult content onto the school network.</p> <p>The keyword algorithms include common slang terms, acronyms and abbreviations related to adult content and sexual acts, as well as terms that young people may use to deliberately try and evade school filters to find such content.</p>
Self Harm	promotes or displays deliberate self harm		<p>Impero Education Pro contains a dedicated set of keyword algorithms around the areas of self-harm, suicide and eating disorders that help to identify children who may be seeking information, sharing tips, or engaging with others on sites of unwelcome persuasion, such as Pro-Ana or Pro self-harm forums.</p> <p>These algorithms have been developed in conjunction with specialists at national charities, such as Harmless, Hey Ugly, Beat (Beating eating disorders), and ANAD (National Association of Anorexia Nervosa &amp; Associated disorders), as well as young people themselves.</p>

Suicide	Suggest the user is considering suicide		<p>Impero Education Pro contains a dedicated set of keyword algorithms around suicide that help to identify children who may be seeking information, sharing suicidal thoughts, or engaging with others on sites of unwelcome persuasion, such as Pro-suicide forums.</p> <p>These algorithms have been developed in conjunction with specialists from leading charities, such as Harmless, Hey U.G.L.Y and iKeepSafe, as well as young people themselves.</p>
Violence	Displays or promotes the use of physical force intended to hurt or kill		<p>Impero Education Pro contains a dedicated set of keyword algorithms around the areas of weapons and violence.</p> <p>Algorithms include explicit references to different types of firearms, knives and other weapons, including makes of such devices, and slang terms for carrying out acts of violence using such weapons or physical force.</p> <p>Impero's anti-bullying algorithms also pick up on threats relating to physical violence.</p> <p>These algorithms have been developed in conjunction with specialists at national charities, such as The Anti-Bullying Alliance, as well as young people themselves.</p>

This list should not be considered an exhaustive list. Please outline how the system manages this content and many other aspects

**Quality and management of content**

No monitoring system can be 100% infallible as language and slang terminology is constantly changing and evolving.

To create the lists of key terms used in the software's algorithms, and to try to ensure that these terms are as useful and up-to-date as possible, Impero works closely with specialist expert organisations in the field. Impero also executes its own keyword focus group research with students in partnership schools.

Currently, keyword terms are updated at least once a term and include changes made based on customer feedback and/or any new research.

We work closely with a number of partnership schools to test our keyword policies in real school environments before release and are constantly improving our policies based on customer feedback.

All keyword terms come with a definition to help explain their significance and why they have been captured. This information helps teachers to understand the context of the term being flagged and assess risk, so they can make good judgement calls on what action to take next - without needing to be experts in all the different aspects of safeguarding issues.

Common misspellings, slang and 'text speak' style terminology are included as standard as part of the algorithms.

If a keyword algorithm is detected, then a screen shot/video recording of the device is triggered along with who, what, where, when style information so that an incident can be put in context and necessary measures can be taken by staff to open up appropriate dialogues with students and safeguard or manage behaviour accordingly.

### **Customisation**

To help localise their system, schools can add their own bespoke terms to the keyword detection policies, such as student/teacher nicknames, gang names etc. to help identify geographically-relevant concerns.

Keyword policy items can be edited or deleted to suit the needs of the school and to help reduce false positives.

Detection settings can be configured to suit different groups of users or devices. For example, a school may want to apply a higher level of detection settings for a particularly vulnerable group of students (such as those who have special needs) and ensure that email alerts are triggered and sent to key named personnel for any serious captures detected in relation to those students. Likewise, schools may want their 6<sup>th</sup> formers or staff to have a higher level of access to the internet and lower detection levels for certain keywords.

All detection policies can be scheduled so different policies can apply to different parts of the school day, and can also help with the management of school devices when off site.

All terms within each policy are customisable in terms of the level of detection and automated related sanctions, e.g. take screen shot, take screen video, log user off, ban the internet for X minutes, send a warning message to the user etc.

Notifications, such as email alerts, can be set to automatically report concerns outside of the system to appropriate members of staff and class teachers can see and manage screenshot captures within their lesson view as they occur.

### **Managing captures**

Impero Education Pro contains inbuilt tools to allow school staff to easily manage, triage and escalate concerns that have been captured.

Captures can be flagged as resolved, under investigation, escalated, or as a false positive, and notes can be added to record any actions taken by staff. All changes to these flags are automatically logged against a user so that a full audit trail of actions taken, and by whom, can be tracked and reviewed.

The log viewer also allows schools to observe patterns of behaviour over time for individual students as well as timeline data, such as what websites a student has visited, what applications they are using, what files they have deleted etc.

It is also possible to export captures to PDF or Excel so that data can be easily shared with other key stakeholders as appropriate and/or added to other relevant school systems, such as a student's behaviour record within the MIS system.

The viewing of captured data logs can be restricted by permissions so that only specified staff members can see an individual's or a group's data and the workload of viewing data can be easily shared and/or partitioned across different members/departments of the school. For example, a school may want to set up viewing permissions by heads of year, pastoral care staff, form tutors, SENCO, DSL, class teacher, or a combination of all of these.

Impero Education Pro also contains classroom control tools and live thumbnail views, providing class teachers the ability to monitor in real time and manage students' use of ICT equipment, helping to break down some of the barriers to using ICT in lessons.

In conjunction with these teaching tools, keyword triggered data captured within a teaching session can also be seen live by the class teacher, so that it can be dealt with there and then, or escalated straight away, in the same way as any other behaviour management or safeguarding issue. The online safety monitoring tools, in combination with classroom teaching tools, means that a whole school approach and a managed approach to online safety can be easily implemented.

Providers should be clear how their system does not over block access so it does not lead to unreasonable restrictions

The main purpose of the online safety monitoring tools within Impero is to monitor and capture incidents, not to block or restrict content.

If a keyword phrase is detected then a screen shot/screen video of the device is triggered along with who, what, where, when style information so that an incident can be put in context and necessary measures can be taken by staff to open up appropriate dialogues with students. This enables staff to educate, safeguard or manage behaviour.

Although the ability to block against the keyword algorithms or websites when triggered is something that can be set within Impero Education Pro, this is something that is a proactive choice decided by the school themselves against individual terms, or groups of terms, rather than something that is set as standard.

The blocking tools and policies in Impero Education Pro can also be used to give schools the confidence to open up their main filtering system; if students do take advantage of more open access, any untoward sites can be quickly closed down on-the-fly during a lesson using the block functionality within the classroom management tools.

The scheduled policy tools can be used to open up or close access to sites automatically, such as Facebook, for specific time periods, devices or groups of users during the day as required.

All terms are customisable in terms of the level of detection and automated related sanctions e.g. log user off, ban the internet for 5 minutes etc. Other automated responses include sending a message to users and sending notifications, such as email alerts to flag concerns outside of the system.

## Monitoring System Features

How does the monitoring system meet the following principles:

Principle	Rating	Explanation
<ul style="list-style-type: none"> <li>Age appropriate – includes the ability to implement variable monitoring appropriate to age. This will in turn define which alerts are prioritised and responded to</li> </ul>		All keyword policies can be set against different user groups (such as year groups) with bespoke detection, filtering and alert settings applied to each of these groups.
<ul style="list-style-type: none"> <li>BYOD (Bring Your Own Device) – if the system includes the capability to monitor personal mobile and app technologies (ie not owned by the school), how is this deployed and supported?</li> </ul>		Impero Education Pro can be installed on an end user's device.  A 'Pin Grouping' function is included so that students can login using a pin number; this allows a class teacher to easily group, monitor and manage these devices on an ad-hoc basis.
<ul style="list-style-type: none"> <li>Data retention –what data is stored, where and for how long</li> </ul>		Impero Education Pro is completely configurable. This enables a school to control how long they wish to retain data for and where this data

		is stored.
<ul style="list-style-type: none"> <li>Flexibility – schools ability to amend (add or remove) keywords easily</li> </ul>		<p>The keyword policies are fully customisable. Terms can be added or removed as required. In addition, individual terms can be edited to change</p> <ul style="list-style-type: none"> <li>Severity</li> <li>Detection settings e.g. trigger only if the term is typed.</li> <li>Trigger actions e.g. take video capture/lock screen/send message to student/send email alert etc.</li> </ul> <p>These edits can be performed on an individual term basis or applied to a batch of selected terms in one go.</p> <p>A school can also set up their own bespoke policies to group related terms together and easily import sets of terms for this purpose.</p>
<ul style="list-style-type: none"> <li>Monitoring Policy – How are all users made aware that their online access is being monitored? Is any advice or guidance provided to support schools?</li> </ul>		<p>Impero Education Pro contains an Acceptable Use Policy (AUP) display tool that allows schools to display an onscreen AUP or notification message to users when they log in to a device.</p> <p>This on-screen display can be set to appear on every login or the first time a user logs in since the message has been created and activated.</p> <p>Different user groups can receive different on screen messages.</p> <p>In addition, we always encourage schools to make students aware that they are</p>

		<p>being monitored and work with you to support your deployment of the system</p> <p>In our handbook we provide template text for AUPs and home school agreements, as well as letters and poster templates to help schools communicate the use of monitoring tools to both students and their parents.</p>
<ul style="list-style-type: none"> <li>Multiple language support – the ability for the system to manage relevant languages?</li> </ul>		<p>The Impero Education Pro system is based on Unicode characters which allows us to support any language.</p>
<ul style="list-style-type: none"> <li>Prioritisation – How are alerts generated and prioritised to enable a rapid response to immediate issues. What operational procedures are in place to facilitate that process?</li> </ul>		<p>Alerts are triggered by keyword algorithms and their detection settings.</p> <p>All captures within the system are given a severity rating, enabling schools to prioritise these easily.</p> <p>In addition, schools can set up email alerts based on different criteria such as groups of users, types of terms, severity of terms, or a combination of these factors.</p> <p>Alerts are also generated within individual teaching sessions as part of the classroom control interface; a teacher can view captured data relating to their lesson as it occurs and manage accordingly, rather than having to wade through logs retrospectively after a teaching session.</p> <p>Best practice guidance on prioritising, viewing and managing captures is given in the SLT e-safety handbook that accompanies the software.</p>

<ul style="list-style-type: none"> <li>Reporting – how alerts are recorded within the system?</li> </ul>		<p>All alerts are recorded in real time.</p> <p>If an alert is triggered then a screen shot (and for severe captures, a screen video) is captured, along with detailed information such as the user ID, the device the user was on, time, date, and the trigger term.</p> <p>Once triggered, this data is then recorded in the log viewer, which is a searchable log of all captures across the school.</p> <p>If a teacher is using the teaching tools element of Impero then they can also view any captures triggered within their teaching group from the Computer List/Class View or a librarian can view all data triggered within computers in the library, for example.</p>
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Please note below opportunities to support schools (and other settings) with their obligations around Keeping Children Safe in Education?

Impero Education Pro supports schools, colleges and looked after children residential homes in delivering their obligations around Keeping Children Safe in Education as the system helps to:

- Provide a safe and practical learning environment by combining classroom control technology and keyword online monitoring technology in one interface. This approach means that individual classroom teachers can break down the barriers of using ICT devices within their lessons by monitoring live thumbnails of students' devices, view any screen captures, and handle any e-safety/behavioural incidents as they occur live within their lesson – just as they would manage any other type of behaviour management issue. This, coupled with its central management and reporting console, website blocking, allowing and whitelist functionality and one touch buttons that allow teachers to temporarily disable the internet/applications for selected students within their lessons enables schools to easily implement Ofsted's recommended 'whole school' and 'managed' approach to online safety where children can safely learn to assess risks for themselves and become responsible digital citizens.

- Support teachers to make good judgement calls around potential safeguarding issues as they arise, as when a concerning term is triggered a full explanation of the term detected and its potential significance is given. For example, the detection of the term 'Cotton wool method' may be an indication of a potential eating disorder as the technique of eating cotton wool to suppress hunger pangs without taking in calories is often discussed on pro-anorexia forums and/or by those with an eating disorder. Providing these insightful definitions not only helps to educate staff, but also aids them with tools for early intervention so they can identify potential situations quickly and keep an eye on them before they escalate. It also helps give teachers the confidence to open up sensitive dialogues with pupils or escalate incidents as appropriate.
- Put children at the centre of safeguarding by providing schools the ability to view and manually edit the terms provided in the keyword detection policies and set up additional actions to perform, such as send an email alert to a specified member(s) of staff or block internet access, as well as set the parameters for when a word is detected (e.g. only detect from the keyboard, and within emails). This helps schools easily reduce and manage false positives (a common complaint with all e-safety monitoring systems), but truly personalise the system to suit the vulnerability of specific children and put them at the centre of safeguarding activity.
- Encourage children to disclose safeguarding issues/concerns through an electronic reporting tool called 'Confide' that enables students to submit any causes for concern they may have about themselves, or another student, to designated members of staff. This can be set to be anonymous if they choose and all submissions are fully logged, with actions tracked within the system.

In order to support schools in their use of Impero Education Pro for safeguarding, Impero provides online training for teachers as part of its customer support package.

Impero also regularly holds seminars with prestigious guest speakers to ensure schools are up-to-date with the latest guidance and challenges in relation to online safety.

Impero, in partnership with Victvs, also provides online safeguarding training courses (with a dedicated online safeguarding forum) for schools. These courses are CPD (continued professional development) and plain English certified and cover all the safeguarding areas outlined in the Keeping Children Safe in Education guidance.

## PROVIDER SELF-CERTIFICATION DECLARATION

In order that schools can be confident regarding the accuracy of the self-certification statements, the supplier confirms:

- that their self-certification responses have been fully and accurately completed by a person or persons who are competent in the relevant fields
- that they will update their self-certification responses promptly when changes to the service or its terms and conditions would result in their existing compliance statement no longer being accurate or complete
- that they will provide any additional information or clarification sought as part of the self-certification process
- that if at any time, the UK Safer Internet Centre is of the view that any element or elements of a provider's self-certification responses require independent verification, they will agree to that independent verification, supply all necessary clarification requested, meet the associated verification costs, or withdraw their self-certification submission.

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Position	Chief Technical Officer
Date	10.10.16
Signature	