

# Protecting School Communities

Studentnet Education Expert Series  
Dr Kate Lance, May 2023



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## Introduction

*This paper, from the Studentnet Education Expert series, has been prepared to help schools improve and protect their relationships with their supporting communities.*

*As the chosen provider of identity protection & authentication services for many leading schools, Studentnet is in a position to provide unique insights into what works when it comes to building and developing school communities.*

*Through our Cloudwork product, Studentnet has specialised in delivering identity services for schools for over fifteen years. Today this area is one of both increased risk and accelerated change – but with that also comes great opportunity.*

*We hope this paper stimulates your thinking and prepares you for embracing these exciting new opportunities. No school is the same as any other, and we are always happy to discuss your school’s unique context.*

### Kevin Karp

MD, Studentnet



## Executive Summary

School communities are no longer simply made up of staff and students – there are others, such as parents, alumni, governors and volunteers, who are fundamental to school viability, and whose roles with schools evolve over time.

If schools do not cultivate their own communities, they risk losing valuable support, influence and funding to the walled gardens of the technology giants, with all their associated privacy and security issues.

We discuss the importance of supporting communities, how their roles change, what their needs are, and how to welcome and protect those people whose contributions are essential, but who are too often taken for granted.

How can schools recognise and protect their supporting communities?

## A Time of Ongoing Transition

When Covid-19 struck in March 2020, it highlighted a transition already in progress for a decade. Suddenly schools went from face-to-face teaching with a remote component, to an environment almost entirely based upon remote learning.

This was possible only because of the growth of the Internet and the ubiquity of computing devices. But this milestone also demanded an enormous commitment from parents and other support communities, who had to schedule lessons, supervise assignments, and help maintain student focus at home.

**Supporting communities became involved in the educational mission of schools as never before, and this fundamental shift in their role is only likely to continue, develop and expand.**

There are other transitions on the horizon, such as AI and its challenge to critical thinking, or the accelerated migration to the cloud of on-premises services for schools. But here we will focus on the value of supporting communities to schools.



## Who Are the Supporting Communities?

Independent schools rely upon fees and donor support. Many have marketing, business and finance sections that focus on school reputation, branding, engagement and fund-raising, which in turn rely upon the *collaboration of their communities*.

**Schools are ecosystems of multiple communities that contribute to school well-being, social development and viability.**

### Parents

The largest non-standard school community is the parents, or those in parental roles, whose contribution at many levels to the school's mission is enormous and wide-ranging.

### Governors

School governors and directors are usually highly qualified professionals who freely offer their experience and skills to school boards and committees.

### Alumni

Alumni raise the school profile, connect with classmates and, as parents, enroll a new generation of children at the school. The loyalty of alumni is fundamental to the school's future.

### Volunteers

The energy of volunteers bring together the social aspects of a school. They organise festivals and events, work in canteens or uniform shops, or help as classroom or special needs aides.

**The value to schools of these supporting communities is profound. But unlike staff and students, they do not easily fit into the standard roles.**

**Many schools find it difficult to deal with populations that have long-term, evolving and changing relationships to the school.**





## The Cycle of Roles

Parents choose their children's schools and support their educational mission. Alumni choose where their networking and funding will go. Volunteers, from the board to the canteen, choose where to dedicate their time and effort.

**But students grow up. Staff become parents. Students become alumni. Alumni become parents. Students become staff. Parents become volunteers. Alumni become school directors, and so on ... All will develop different and evolving identities with the school.**

**How do schools continuously build on and protect the value of their communities?**

## Connecting School Communities

Schools have large numbers of people entering, leaving and changing their status every year. The functionality that holds school communities together is access to digital resources.

Nothing at schools can be planned, allocated, organised, monitored or assessed without IT facilities, and the authorised access to those facilities is granted through *user accounts*. The word 'account' can mean a detailed record, or a value such as a reputation or a financial arrangement, but the digital usage is:

*An electronic identity, a username and its associated data, assigned to an individual or group for secure, personalised access to a website, network, digital service, etc. (dictionary .com)*

As an electronic identity, accounts contain *records*: logs and files that may extend over years. Even more aptly, these electronic identities are repositories of *value*, financial, social, reputational, professional and life-related .

**All school communities need their electronic identities supported through personalised, secure, long-term accounts.**

## The Attributes of Parents

**Parents (and guardians and family members) are the most important of the school's communities, as allies and supporters of education. Here are some of the ways they relate to schools.**

### They Pay the Bills

Parents take on large financial responsibilities that may span decade, especially if more than one child is involved. Without their fee payments, private schools could not exist.

### They are Independent

Parents are free to choose the school their child will attend, based upon what matters to them. In some cases they may have a sense of loyalty to a school, but their decisions are ultimately pragmatic and their own choice.

### They are Vocal and Networked

Parents can be vocal about their expectations and perceptions of a school. They are networked into groups of other parents, alumni, co-workers and the wider community, so their opinions and information can circulate to many people.

### Their Relationships may be Complicated

Some parents experience separation, divorce, remarriage and the complexities of extended families, while even work or travel issues may introduce sensitive problems, of both communication and privacy.

### They are Tech-Savvy

Parents of children at independent schools may themselves have differing levels of education, but in today's world the vast majority are comfortable with the latest technology and expect their children's schools to be likewise.





## The Needs of Parents

**One single need of parents determines everything they require of schools: schools must *protect* their precious children at every level—physical, emotional, technical and administrative.**

### Insight

Parents need to know timetables, events, attendance. They need to understand their child’s activities, development, awards and well-being, and be quickly notified of any issues.

### Interaction

Parents need to be able to interact with school records, to easily update medical and contact details, see statements and make fee payments. They need to be able to notify absences or lateness, and book parent-teacher or other staff interviews.

### Privacy and Security

Parents need all data on their children and their families to be securely protected, both physically and digitally, including academic and medical records, contact details, professions, and home and work locations.

### Communication

As a supporting community, parents need long-term, secure, and personalised communications with the school, including access to email, data storage, services and relevant, well-resourced facilities.

### Identity

Parents need their identities with the school defined and respected, with viability over time. They want control of aspects of their identity such as usernames and email addresses for an enduring digital presence.



## The Common Link

The attributes and needs of other school communities, like alumni and volunteers, are not identical to those of parents, but as an ecosystem of communities they are all independent, vocal, networked and tech-savvy, and they need interaction, privacy, communication, and identity.

**Another common link between all the non-standard school communities is that they are *free to choose* the support they offer — and they can withdraw that support at any time they wish.**

Independent schools simply cannot function without these external contributions, but they don't have the IT departments of private companies, and must cope with enormous demands on their digital facilities with often minimal resources.

This usually mean their systems are set up to provide accounts only for the classic populations of students and staff, and cannot deal with the access requirements of other school communities. So in terms of their welcome to digital resources, support communities are sometimes treated as second-class citizens.

This challenge extends far beyond any technical aspects, because the attributes and needs of the non-standard communities are essential to the future viability of schools.

**There are numerous online media and technology groups desperate to attract such valuable resources, which will ultimately diminish the roles and reputations of schools.**

**Schools must continually maintain and develop their relationships with their supporting communities, otherwise they risk losing them.**



## Why Does this Issue Exist?

The community account issue arises because because of the difficulty of configuring school directory services – the shared information infrastructure for locating, managing, and organising resources on a network, such as folders, files, users, groups and devices.

In particular, directories authenticate and authorise users for access to resources, so may define individual student classes, years, school houses, sports teams, special-interest clubs, off-campus activities, etc, to a very fine level of granularity.

**But most directory services require expensive licensing for any additional community accounts, so administrators can usually offer only limited resources.**

## The Issue Worsens Over Time

Within a few years most, if not all, on-premises services for schools will have migrated to the cloud. But a recent common cloud service solution in dealing with community accounts is to provide *guest accounts*.

Guest accounts are not the way to treat people who, for decades, may have volunteered at all levels from the board to open days, whose long-term loyalty underpins school viability, and whose fee payments and continued collaboration are essential to the school's very existence.

**Community users need *personalised, long-term and secure access* to school systems, but guest accounts are an anonymous, short-term and offensive quick fix. They are also a security nightmare.**

## Security and Guest Accounts

Guest accounts are a major security issue as they are difficult to distinguish from phishing attacks (attempts to steal login or financial credentials).

This is because their URLs redirect to a different site from the one users are trying to access. For example, a tech journalist was horrified to be offered a guest login from Queensland Health when registering:

‘Because it’s an automatic redirect, this is pretty indistinguishable from a phishing attack ... it trains people that putting your details into an unknown site from a purportedly ‘official’ email is safe. It is not.’<sup>1</sup>

Currently a few businesses promote guest accounts as the ‘easy’ solution to community accounts. But their focus is only on one aspect of the problem, and glossing over these major shortcomings will damage school reputation and viability.

## Welcoming the Supporting Communities

School community accounts are a wide-ranging issue that demand a complete rethink of the value and benefits schools derive from all their non-standard supporting communities.

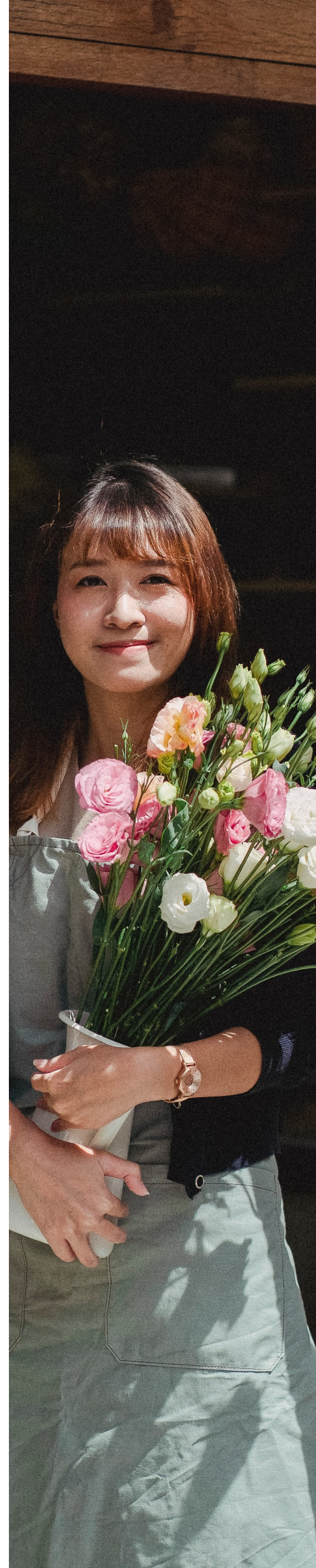
If schools don’t welcome them, they may drift away to online technology walled-gardens, and no longer contribute to vital school infrastructure. Supporting the school communities demands a reconsideration of school priorities.

Parents, governors, alumni and volunteers are not transient guests. They are valued, integral members of the school ecosystem and should be welcomed and protected.

Is there a solution to this challenge?

**Yes! *Inexpensive software* is available that works side by side with directory services and provides full access to digital resources for all school communities ... Cloudwork®.**

<sup>1</sup> <https://twitter.com/drzax/status/1429737790611214336>



## The Community Account Solution

**Studentnet's unique Cloudwork® system can operate in tandem with standards-compliant directory services, and provides full access to resources for community accounts (see feature list below).**

### Features of Cloudwork's Community Accounts

#### 1. Single Sign On (SSO)

**Authentication operates independently of directory operation and availability**

- Sign into any service signs into all services, with single logout
- Full support for most portals – ECom, SynCom Portal, etc
- Mobile app support – EnrolHQ, Digistorm, etc
- Customisable, school-branded sign-on page on all services
- Sign-on page theme is configurable in Dashboard
- Community & casual user accounts are specifically supported
- Multi-factor authentication (MFA) is available
- Over one hundred education apps and services available, see <https://studentnet.net/services>

#### 2. Credential Management

**Single point of control of identity management, via easy and function-rich Cloudwork Dashboard**

- Password synchronisation with directory services
- Password changes available before and after sign-on
- User-friendly friction-free, no-touch password reset
- Usernames cater to the needs of community accounts
- Privileged Identity Management
- Cloudwork.ID services management
- Automated welcome and credential info to new accounts
- Broadcast bulk welcome message notifications
- Complexity rules when creating and changing passwords
- Weak and compromised password detection and rejection
- Compliance with other password re-use rules

### 3. Account and Group Provisioning

Automated provisioning and maintenance of community account details into directory services and other school management systems

- Cloudwork account provisioning API
- CSV upload provisioning
- On-the-fly provisioning with compliant services
- API level integration with popular School Management System data sources

### 4. Logging, Reporting and Forensic Diagnostics

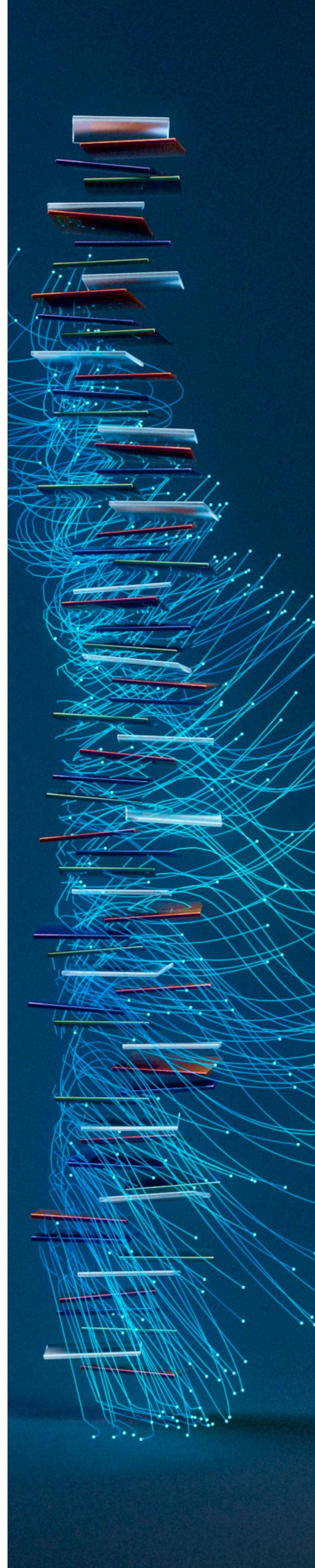
Cross-service, real time logging and charting of all activity

- Single view of activity offers service trends and forensic analysis capabilities
- Log reporting filterable by user, service, event, date & time
- Weekly activity summary direct to administrator inbox
- Fine grain activity recording for the following events: authentication, authentication failed, authorisation, password reset started, invalid password reset code, password reset complete, update password recovery details, password change, create user, update user, delete user, silent inspection, change theme settings, administrator management reporting

### 5. Security and Reliability

Committed to highest levels of standards-based security

- Minimal, tightly constrained firewall rules
- Fully cloud-based external authentication
- Independent authentication, allowing for the completion of authentication without other directory availability
- All transmissions and communications are fully SSL encrypted
- Fully encrypted storage of passwords: clear-text passwords are never seen or stored
- Studentnet was the first education-related internet organisation to join the ACMA's [Australia Internet Security Initiative](#). Studentnet joined AISI prior to any University or education-related ISP.
- Studentnet is a registered partner of the Australian Cyber Security Centre(ACSC) section of Australian Signal Directorate part of the Australian Defence Department



## Studentnet®

[Studentnet](#) has been assisting schools since 1996 and is dedicated to the needs of educators, students, parents, IT staff and all school communities.

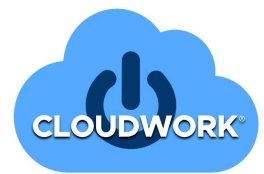


Studentnet is also committed to providing the highest possible levels of security and privacy. [See here](#) for a listing of Studentnet's privacy and security credentials.

Studentnet has qualified for the Safer Technologies 4 Schools initiative, a standardised approach to evaluating digital products and services used by schools across Australia against a nationally consistent security and privacy control framework.

## Cloudwork®

[Cloudwork](#) has been a specialist cloud-based resource for account services since 2009. It allows data to be drawn from AD, Azure AD, TASS, Adobe, Google Classroom, or any other standards-compliant directory resource.



Cloudwork not only provides community access accounts, it is economical and offers the ability for users to easily self-manage their accounts. It is currently employed in at least forty independent schools of all sizes, locations, denominations and educational philosophies.

Please feel free to contact us to discuss this document, any associated issues, or your school's requirements.

Tel: +612 9281 1626 Email: [info@cloudwork.id](mailto:info@cloudwork.id)

Address: Suite 1, 89 Jones St, Ultimo NSW Australia 2007

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# Protecting School Communities

Schools are ecosystems of multiple communities that contribute to school well-being, social development and viability.

What are you doing to protect *all* your supporting communities?

Are you building supporting communities for your school — or for the benefit of the big technology providers?

Are parents and other communities welcomed with access to your digital facilities, or dismissed as occasional guests?

Do you understand the security and reputational risks involved in guest accounts?

Do you recognise the *entire* cycles of roles that sustain a school — from students, to alumni, to parents, to staff, to volunteers and more?

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