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Preservice Teachers: What do They Know about Cyberlaw?

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Abstract: This paper presents preliminary findings from an exploratory multi-method study into pre-service teachers' perspectives regarding legal and ethical issues relevant to the use of ICT in schools. It identifies requirements for legal literacy that not only support legally compliant behaviour, but which can also support the development of active citizenship in students and highlights areas of factual legal knowledge which may require more attention in pre-service education.

Introduction

As with government policies worldwide, Australia currently puts the development of digital literacies or competencies as a key policy goal and much of the responsibility for forwarding this agenda is placed on teachers. (Ministerial Council for Education, Early Childhood Development and Youth Affairs [MCEETYA], 2008). Consequently, this brings into focus questions about the capacity of and support for teachers to deliver on this agenda.

One aspect of digital literacy for teachers that has been little-studied in the Australian context is *cyberlaw* literacy. Cyberlaw, in its broadest definition, encompasses not only laws specifically made to regulate the digital environment, but also general laws that are also applicable to the use of information and communication technologies (ICT) (Cyberlaw, 2005, p.177).

This paper reports some of the preliminary findings from an exploratory study into the perceptions of pre-service teachers about cyberlaw and ethical issues in the school environment. The study uses the *Australian (formerly National) Teaching Standards (Standards)* and *Australian Curriculum (Curriculum)* (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2013) as implemented in NSW as a framework for investigating the issue.

Background

Professional Requirements for Legal Literacies Within the Standards Framework

It has been noted that teachers work in a complex and highly regulated legal and policy environment with high expectations for professional expertise in a wide range of areas, including an understanding of legal issues relevant to the education system (Stewart & McCann, 1999, p.144). That this expectation extends to cyberlaw literacies is clear from examination of the *Standards* (New South Wales Institute of Teaching. 2012) which contain both express and implied requirements for knowledge of law applying to work in schools, including law relevant to the use of ICT (York, 2013, pp. 4-6). For example, *Standard 7* contains an explicit requirement to "Comply with legislative, administrative and organisational requirements" in professional engagement (NSWIT, 2012, 19). *Standard 4* deals with the creation and maintenance of "safe learning environments" and contains a similar explicit reference to "legislation" NSWIT, 2012, p.15). In addition to explicit references, *Standard 4.5* at the "Graduate" (beginning teacher) level is also indicative of a need for legal knowledge. It requires "[demonstration of] an understanding of the relevant issues and the strategies ... to support the safe, responsible and ethical use of ICT in learning and teaching" (NSWIT, 2012, p.15). While other issues are also relevant, it can be argued that, in the ICT environment, telecommunications, copyright, and privacy laws are certainly among those issues pertinent to the safe and

responsible use of ICT. This interpretation is supported by the related *ICT Statements for Graduate Standards* which refer to "understanding safe, legal and ethical use of digital resources and tools ..." (Australian Institute for Teaching and School Leadership [AITSL] & Australian Council for Computers in Education [ACCE], 2012, p.4) In addition to requirements relating to legal compliance, the *Standards*, read together with the *Melbourne Declaration* (MCEETYA, 2008) and the *Curriculum* also point to a need for cyberlaw literacy to support and promote active digital citizenship in students (York, 2013, p.5). Tapp & Levine (1974-1975) define "legal competence and literacy" as "an individual's capacity to resolve legal conflicts and to make rational, ethical legal judgements" (p.3) and go on to suggest that greater levels of legal literacy are required to move beyond mere compliance with, and acceptance of, law to a position of active citizenship. (pp. 7-8). A requirement for this level of literacy can also be found in descriptions of "digital competence" found in the *JRC Technical Report* (Janssen & Stoyanov, 2012, pp.18-21) and *ISTE Standards for Teachers* (International Society for Technology in Education, 2008, see especially Standard 4, p. 4)

Prior Empirical Research

Before turning to studies specifically directed to teachers' cyberlaw literacies, it is informative to briefly summarise findings from studies into general school or education law literacy. School or education law here refers not only to legislative requirements specific to schools, but also to legal issues which are more general in nature which arise in a school context.

One notable feature of this research area is the similarity of conclusions which have been reached over an extended period of time, and in different jurisdictions, and at all levels of teacher experience, regarding the extent and quality of legal knowledge held by teachers. Schimmel and Militello's extensive multistate survey of 1317 US teachers and review of 77, largely doctoral studies, typifies the recurring themes - that "most teachers:

(1) are uninformed or misinformed about student and teacher rights [or obligations] (2) have taken no course in school law; (3) get much of their school law information from other teachers; (4) would change their behavior if they knew more about school law; and (5) want to learn more about these issues" (Schimmel & Militello, 2007, p.257).

That this is an international phenomenon is confirmed by a metastudy of Canadian, U.S., Australian and Botswanan research (Davies, 2009). In Australia, Stewart (1996) and McCann (2006) in their studies of principals' legal knowledge in Queensland public schools and NSW Catholic schools, respectively, identified a wide range of legal issues relevant to schools and similarly found significant gaps in participants' knowledge. A more recent, small scale Tasmanian study by Trimble, Cranston & Allen (2013) again found low levels of legal understanding. Studies into NSW teachers' legal knowledge and requirements for professional development were undertaken by Harapin (2003) and Newlyn (2006) and both reported significant gaps in knowledge.

U.S. and Australian studies provide evidence that in the area of cyberlaw, as with general school law, teachers and pre-service teachers may lack adequate relevant knowledge. In the U.S., the *National C3 Baseline Survey* (Pruitt-Mentle, D. & Educational Technology, Policy Research, and Outreach [ETPRO], 2008) surveyed 1,569 K-12 educators and 94 technology coordinators about C3 (Cyberethics, Cybersecurity and Cybersafety) topics, some of which were legal in nature. Additional qualitative data was collected via interviews and focus groups (pp.15-16). The study used a 5 point scale where "3" is the "threshold comfort level" (pp. 41,42, 45).

It found that teachers felt unprepared to model, instruct, or guide students on most of the topics. Only 18% of teachers felt prepared to guide students on the common practice of downloading, 31% could deal with general digital media copyright law; and 36% could deal with educational copyright issues (pp. 43-44) The highest "comfort score" in the Cyberethics area was for the topic of "Plagiarism" (3.34), but a significant minority (28%) were unprepared and only 49% were "well" or "very well" prepared (p. 46). Overall, teachers were even less prepared for issues including cyberbullying, privacy, use of social networking services (SNS), and criminal activities like stalking and harassment) (p. 46). The study notes that 75% of educators were not "comfortable" dealing with cyberbullying, a subject that had received extensive coverage in media and school settings (pp. 6, 41-43). The authors suggested that the general lack of "comfort" might be explained by the minimal amount of professional training and development received by most educators (pp. 59-61). A 2010 follow-up study found that some improvement in self-assessed preparedness to teach, but translation into classroom action was limited with 22% of

"content teachers" prepared to discuss cyberbullying with students despite extensive state and national campaigns (Pruitt-Mentle, Pusey & ETPRO, 2010, p. 10).

Pusey and Sadera (2011) looked at pre-service teachers baseline understanding of C3 (p. 83) and questioned whether, so-called "digital natives" had acquired a level of understanding of C3 issues pertinent to teaching practice (pp.83,87). Their survey of 318 teaching undergraduates at a US college included tests of factual knowledge together with scale questions on "awareness" and "preparedness" to teach C3 topics. Legal issues covered included *inter alia*: copyright, privacy, cyberbullying, predators, hacking, defamation, acceptable use policies, end-user licence agreements, and internet -relevant legislation related to child protection, education and privacy (pp. 85-86). Overall, the study revealed low levels of preparedness. Participants reported being able to teach only 4% of the topics (mostly common uses such as email and texting) (pp. 85-87). Key pieces of legislation dealing with "student rights, school policy and data [that] teachers must protect" were among the 56% of topics that the preservice teachers had never heard of or were unsure about (pp.85-86).

Little cyberlaw-specific research has been conducted in Australia. The national IRIS Cybersafety study surveyed 2088 teachers on topics including teachers': internet skills; cyber-safety practices; "awareness" of cyber-safety issues, response to "incidents", type of incidents, and "awareness and [use of] ... cyber-safety information" (IRIS Research Ltd and Australian Council for Educational Research, 2011, p. 9). The results indicated an overall perception that direct technical controls were "the most effective cyber-safety preventative measures in schools"(p.53), with education and information for students being seen as significantly less effective (p. 54). It is possible that, as in the C3 studies, this may reflect a lack of sufficient legal and ethical knowledge to be able to guide or model appropriate use, as noted in the above studies.

A more detailed study of Victorian middle school students,' teachers' and parents' perceptions of legal risks associated with SNS found that teachers' ideas of legal risk were vague and limited to a narrow range of issues (e.g. cyberbullying and grooming) with "little clear understanding ... of the precise nature of risks that may arise from everyday SNS use" (de Zwart, M.J., Lindsay, D., Henderson, M. & Philips, M., 2011, pp.61-62)"

Other Australian studies examined professional knowledge bases from a TPACK perspective, but did not investigate cyberlaw knowledge except in a very general sense. For example, the *Teaching Teachers for the Future (TTF) TPACK Survey* instrument measures perceptions of confidence and usefulness on a self-rated scale with items such as "How confident are you that you have the knowledge, skills and abilities to support students' use of ICT to ... demonstrate an understanding of safe, legal and ethical use of digital information and technologies" (Jamieson-Proctor, R., Albion, P., Finger, G., Cavanagh, R., Fitzgerald, R., Bond, T. & Grimbeek, P., 2013, p. 35). The survey did find, however, that pre-service teachers were "least likely to be confident that ICT would support teaching in relation to ... Digital citizenship to promote student demonstration of rights & responsibilities in use of digital resources & tools (Finger, G., Jamieson-Proctor, R., Cavanagh, R., Grimbeek, P., Albion, P., Bond, T., ...Lloyd, M., 2013, 16), which resonates with the findings from the other studies in this area.

The review of prior research indicates that gaps in teachers' cyberlaw literacy have been identified internationally and that few in-depth studies have been conducted into cyberlaw literacies of Australian pre-service teachers. Because new teachers must perform at the level required by the *Standards* it is important to establish their level of understanding of ICT-related legal issues. The research question examined in this exploratory study is (a)What are the perceptions of preservice teachers about their professional and legal obligations regarding significant legal and ethical issues and (b) what has informed their perceptions?

Method

This study is part of an exploratory doctoral research project. A multi-method strategy was employed on the basis of its suitability for conducting an exploratory study by providing opportunities for triangulation from a variety of data sources, deeper insights into the subject area and to aid in the development of new research instruments (Denscombe 2010, p. 299). Multi-method approaches have previously been used in Australian studies into teachers' general legal literacy (McCann 2006; Newlyn 2006; Stewart 1996) and into legal literacies related to use of social networking services (de Zwart, Lindsay, Henderson, & Philips 2011).

An earlier stage of the research identified which legal and ethical issues were *significant* (ie issues which might be commonly encountered in practice and/or issues which might result in serious legal or professional consequences) in the context of the current legal, regulatory and policy environment. To this end, the following categories of documents were analysed from a legal perspective: Australian and international studies into teachers' general legal literacy and cyberlaw literacies; Australian case law and legislation; *Australian Institute for Teaching and School Leadership Professional Standards* and the NSW implementation of the *Standards*, and the *National Professional Standards for Teachers - ICT Elaborations for Graduate Teachers*; state syllabus and *National Curriculum* documents; state and national education and related policy documents; and policy documents for schools, teachers and students produced by the NSW Department of Education and Communities and major private sector employers of teachers.

Legal doctrinal analysis of available documents provides an incomplete picture of significant legal issues related to use of ICT because case law does not deal with unlitigated matters or problems or issues settled out of court. Further, teachers' work and professional obligations can also require legal understandings that relate to aspects of pedagogy and other professional requirements (York, 2013). To gain more complete data, semi-structured interviews were conducted with informants purposively selected on the basis of their special knowledge of, and different perspectives on, legal and ethical issues affecting teachers. A total of 16 interviews were conducted with: 1 senior lawyer and 2 senior administrators from major public and private employers of teachers; 1 teachers' union officer; 2 teacher-educators from tertiary institutions; 3 lawyers from private firms working in the education/school law area; 4 senior teachers or school managers (ie principals, deputies, subject co-ordinators, head teachers and teachers with five or more years teaching experience) and 3 early career teachers (up to two years' experience post graduation). In an iterative process of analysis based on the model proposed by Miles and Huberman (1994) legal and ethical topical themes from the document and interview data were identified for further examination in the second stage of data collection.

In the second stage, an anonymous online questionnaire utilising *Limesurvey* was developed to examine pre-service and recently graduated teachers' perceptions about the issues identified in the first stage. In developing items for the instrument, consideration was given as to the level of understanding required: by the *Standards* at the Graduate level, from the interviews for individual areas of legal content knowledge, and content knowledge indicated in curriculum documents.

Four students in the final year of an education degree piloted a draft instrument. Accuracy of the legal content, wording of the instrument and appropriateness of the scenarios was validated by a barrister practising and lecturing in the area of media and communications law. Further validation of the instrument and general feedback was obtained from two teacher-educators with expertise in digital literacies and one early career teacher. The final instrument included a total of 73 items and sub-items as follows: identification of educational background and prior legal training (6); sources of legal information (2); NSW and Commonwealth law factual knowledge by closed questions (24); and, current level of awareness of legal and ethical issues on 5 point self-rated scale (41). With one exception (which required participants to enter a whole number), the factual items were posed either as short scenarios or as statements about law where only one of between 3-6 alternative responses was correct. An "I don't know" response was included to reduce guessing.

The anonymous online instrument was made available to pre-service teachers in their final semester at three NSW universities (Universities A, B and C) during October-November 2013. Data from participants who either provided no responses, or who responded only to the first two demographic questions, was not included in the analysis .The closed-item and scale responses from 235 students were analysed using descriptive statistics and this initial analysis is the subject of the following discussion.

Results and Discussion

This section will present summary data from the survey, before highlighting in more detail findings from the results obtained for items related to intellectual property issues. For the awareness items, overall Cronbach's alpha was 0.973.

In terms of the second part of the research question (b) what has informed pre-service teachers perceptions [of cyberlaw issues]?, 27 (11.5% of 235 participants) had undertaken some form of legal studies prior to commencing

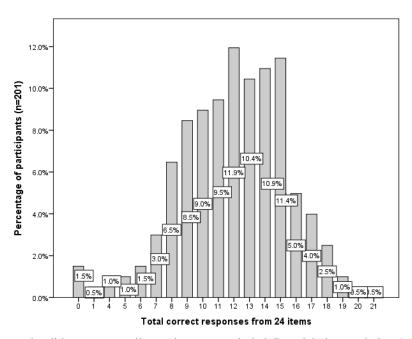
their current degree. Of these 14 (6% of 235) had undertaken legal studies in secondary school and 15 (6.4% of 235) had undertaken a non-law degree with legal content. In terms of their current studies, 153 (65.1%) recalled receiving some explicit instruction about legal issues relevant to schools or teaching and 41 (17.5%) were not sure if they had. Less than half the students (115 or 48.9%) recalled receiving explicit instruction on legal issues about the use of ICT in schools (e.g. use of mobile phones, internet sites, copyright, privacy etc.), and 48 (20.4%) were not sure.

While caution must be exercised in drawing conclusions from an unrepresentative sample, it should be noted that approximately 80% of the primary school teaching cohort at one University took part in the survey and returned similar figures to the aggregated percentages for the remaining two Universities. These figures reveal that the vast majority of participants received no formal legal training prior to their teaching studies. Table 1 presents responses to a closed choice question regarding significant sources of their current perceptions about ICT-related legal and ethical issues. It indicates that informal sources of information (such as friends and family and media sources) are amongst the most significant sources forming pre-service teachers' cyberlaw and ethics perceptions outside of formal educational settings. As noted by Pusey and Sadera (2011, p. 87) relevant knowledge in this area is not "innate" and there is no guarantee younger university students have acquired this knowledge prior to commencing their teaching studies. This underlines the importance of teacher education courses in ensuring pre-service teachers' perceptions of law align with what might be called legal actuality. As will be discussed later, in the context of individual survey items, there may be some common misconceptions about significant areas of law that should be specifically addressed during teacher preparatory courses.

Source	Count	Percent (n=210)
Friends and family	127	60.5%
Education in primary and/or secondary school	121	57.6%
Media stories	108	51.4%
Professional experience (praticum)	104	49.5%
Current teaching degree studies	100	47.6%
Previous tertiary studies	40	19.0%
Online resources (eg Smartcopying site, Cybersmart site, online ICT forums, general searching)	22	10.5%
Other	5	2.4%
Total	627	298.6%

Table 1: Pre-service teachers' responses to the question: Which of the following sources have played the most significant part in your current perceptions about legal and ethical issues related to the use of ICT? (Multiple answers allowed)

The following results and discussion are relevant to the first part of the research question: What are the perceptions of pre-service teachers about their professional and legal obligations regarding significant legal and ethical issues?



Note: Participants who did not answer all questions are excluded. Data labels rounded to 1 decimal place.

Figure 1: Pre-service teachers' total correct responses to 24 factual law items

For the factual knowledge items, the mean number correct was 11.96 with a standard deviation of 3.597, mode and median were both 12. The distribution of total correct answers is shown in Figure 1. Items for which pre-service teachers performed best included recognising the potential criminality of: posting threats on a website (93.4%), use of a mobile phone to video a private activity (91.2%), use of a mobile phone to send a threat (90.7%). Next came understanding the need for appropriate consent before using a student's personal information on a public website (87.4%), and the contractual nature of terms of service or conditions (79.6%). The lowest percentage of correct responses were for items which dealt with: typical terms and conditions for social media websites (6.8%); the age of criminal responsibility (13.2%); students recording, disseminating, or downloading a video of a schoolyard fight (20.2%); fair dealing with online materials and other copyright facts about copying of online materials (21.2%); defamation (24.3%). The percentage correct for 15 of the items was less than 60%. These figures point to a number of areas of law which may require more attention either during university studies, or in the course of employment.

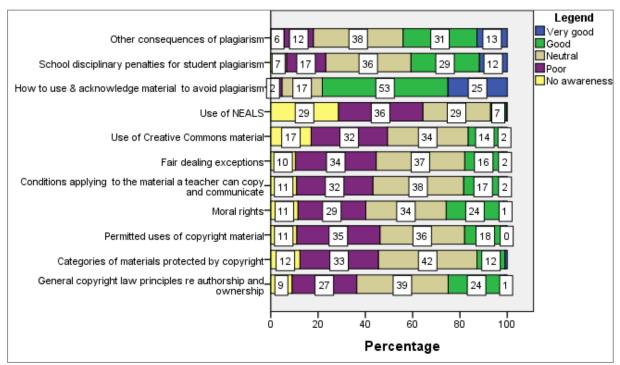
In terms of awareness, the items where pre-service teachers reported the highest mean level of awareness (based on a 5 point scale where 1 is no awareness, 3 is neutral, and 5 is very good) were: how to use and acknowledge material to avoid plagiarism (3.97), need to maintain appropriate professional profile online (3.55), duty of care to students regarding the use of ICT (3.50), need for an appropriate professional context for all communications with students (3.45). The lowest levels of awareness were reported for: appropriate use of NEALS (National Education Access Licence for Schools) materials (2.15), voyeurism laws, appropriate use of Creative Commons materials (2.53), and categories of materials protected by copyright (2.56).

It is not possible to categorically state that giving the correct answers reflects actual knowledge of law on the part of a participant. Apart from guessing, common sense perceptions of law may result in a correct answer, but the reasoning of participants may be related to feelings on that the activities were right or wrong from a moral or ethical perspective and this is an area of inquiry worthy of further study. Interestingly, a small number of participants mentioned "common sense" in open items as a source of information about legal and ethical issues in the school environment. However, it is informative to look at responses to factual questions where the moral or ethical aspects or beliefs may not be so closely allied with legal actuality, as well as related items from the awareness section of the survey. For this reason, the intellectual property items will now be discussed in more detail.

There are some interesting features about the items related to intellectual property in the awareness items and factual items. Figure 2 illustrates the spread of responses regarding intellectual property legal and ethical issues (Cronbach's alpha for these items was 0.905). Participants recorded relatively high levels of awareness of plagiarism, but for

fundamental copyright knowledge such as the general principles of authorship and ownership, categories of materials protected by copyright, moral rights and fair dealing exceptions, between 35% to 46% percent reported no or poor awareness, and only 12% to 25% reported good or very good awareness. In the factual items: 42.7% of participants were able to correctly identify in a scenario question that a school student would own copyright in their homework, 25% did not know, and the remainder chose incorrect options; in another scenario item, 28.2% of participants correctly identified that an idea was not protected by copyright, but failure to acknowledge the source of an idea would be plagiarism; and when presented with 3 popular "myths" about copying from online materials, only 21.2% correctly chose the "None of the above" option. From this it appears that there are significant gaps in the participants' knowledge of copyright law.

Copyright law is one area where teachers require more than vague factual knowledge for at least two reasons. First of all, in terms of the *Standards* discussed earlier, to assess whether a use of a technology to copy something is "safe" or "responsible" requires an understanding of the risks of criminal or civil law sanctions for illegal use of copyright material and understandings of some fundamental copyright principles such as such as understanding what material is protected by copyright, what amounts to a breach of copyright law and what might be a legitimate use of copyright material. Copyright infringement was also identified as one of the most significant legal risks that teachers should be aware of by de Zwart et al (2011, p. 1). Second, the *Curriculum* places ICT as a *General Capability* to be included as content in all *Curriculum* subject areas from F-10 (ACARA, 2013, p.50). One of the elements of the *Capability* is "Applying social and ethical protocols and practices when using ICT" (ACARA, 2013, p.50). Students are expected to be able to develop legal and ethical literacies about ICT, in both the *compliance* sense (e.g. "identify the legal ownership and use of digital products" by the end of year 6) and in the *active citizenship* sense (e.g. "identify and describe ethical dilemmas and consciously apply practices that protect intellectual property" by the end of Year 10) (ACARA, 2010, summary table, p. 53). As a consequence, this becomes required content knowledge for all Australian teachers.



Note: Percentage for each survey item is based on the total number of participants that answered that item (*n* per item range is 209-212). Data labels representing percentages are rounded to zero decimal places.

Figure 2: Pre-service teachers self-rated awareness of intellectual property issues

One limitation of this study, apart from being based on a non-representative sample, is that it does not examine cyberlaw perceptions in practice. For example, while teachers must sometimes act almost instantaneously to a

classroom situation, in other cases, there is time for a teacher to research or seek advice about a particular issue before acting. It does not assess the ability to find and interpret relevant information, which is an important skill in developing and maintaining appropriate levels of cyberlaw literacy. Another limitation is that it isolates the investigation of participants' perceptions to a particular point in time, and does not investigate the transition between graduation and the induction period and initial years of teaching.

Conclusion

With continuing rapid changes in technology, adoption of technologies and the associated legal and ethical challenges, it is particularly important to interrogate whether teachers' legal literacy is of a type that allows them to adapt practices to this dynamic environment. This is particularly significant for the increasing proportion of new teachers employed on a casual and temporary basis (Stevenson, 2012), who may not have access to the same support as permanently employed colleagues. This study has provided information about the status of pre-service teachers' cyberlaw literacies relevant to the current Australian teaching regulatory framework and *National Curriculum*. It has highlighted some areas which might be investigated in more detail such as the misconceptions about legal issues held by pre-service teachers which may persist if not addressed during their time at university.

In terms of the first part of the research question, the survey responses indicated that while there are a number of areas of law where pre-service teachers appear to have relatively accurate perceptions, there are some gaps in their knowledge, including a significant gap in their understanding of fundamental copyright law relevant to teaching. In terms of the second part of the research question, informal sources were amongst the most significant influences on pre-service teachers legal perceptions about ICT. From these findings the importance formal of teacher education, including experiences on practicum, in addressing pre-existing misconceptions was highlighted. While this paper raises the possibility that more extensive training in legal issues might need to be provided before graduation, the difficulty of adding to an already crowded curriculum for pre-service teachers must not be underestimated.

References

- Australian Curriculum, Assessment and Reporting Authority. (2013). Shape of the Australian Curriculum: Version 4.0 [pdf version]. Retrieved from http://www.acara.edu.au/verve/_resources/The_Shape_of_the_Australian_Curriculum_v4.pdf.
- Australian Institute for Teaching and School Leadership & Australian Council for Computers in Education. (2012). *National Professional Standards for Teachers ICT Statements for Graduate Teachers*. [PDF version]. Retrieved from http://www.teacherstandards.aitsl.edu.au/Static/docs/hotTopics/Teaching_Teachers_for_the_Future_-_Graduate_Teacher_Standards_-_ICT_Statements.pdf.
- Cyberlaw. (2005). In R. Samuels (Ed.), *Encyclopedia of United States national security*. Thousand Oaks, CA: SAGE. doi: 10.4135/9781412952446.n140.
- de Zwart, M.J., Lindsay, D., Henderson, M., & Phillips, M. (2011). *Teenagers, legal risks and social networking sites* [PDF version]. Retrieved from http://newmediaresearch.educ.monash.edu.au/lnmrg/article/teenagers-legal-risks-and-social-networking-sites.
- Davies, T.A. (2009). The worrisome state of legal literacy among teachers and administrators. *Canadian Journal for New Scholars in Education* 2(1) 1-9.
- Denscombe, M. (2010) *The good research guide for small-scale social research projects* (4th ed.). Maidenhead, England: McGraw-Hill.
- European Parliament and the Council. (2006). Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. *Official Journal of the European Union*, L394, 10-18.
- Finger, G., Jamieson-Proctor, R., Cavanagh, R., Grimbeek, P., Albion, P., Bond, T., ...Lloyd, M. (2013). Teaching Teachers for The Future (TTF) Project TPACK Survey: Summary of the key findings. *Australian Educational Computing* 27(3), 13-25.
- Harapin, D.G. (2003). *Teachers knowledge of the law in New South Wales* (Unpublished masters thesis, University of Sydney, Sydney, NSW).
- International Society for Technology in Education (2008). *ISTE standards for teachers* (2008). Retrieved from http://www.iste.org/docs/pdfs/20-14_ISTE_Standards-T_PDF.pdf.
- IRIS Research Ltd and Australian Council for Educational Research. (2011) Australian Children's Cyber-safety and E-security:

 *Results of a Teachers' Survey [PDF version]. Retrieved from

 http://www.dbcde.gov.au/__data/assets/pdf_file/0003/135561/Australian_Childrens_Cyber-safety_and_E
 Security_Projectreport_on_the_results_of_a_teachers_survey.pdf.
- Janssen, J. & Soyanov, S. (2012). *JRC technical report: Online consultation on experts' views on digital competence*. Luxembourg: Publications Office of the European Union. Retrieved from
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- http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=5339.
- McCann, P. (2006). Principals' understandings of aspects of the law impacting on the administration of Catholic schools: Some implications for leadership (Doctoral dissertation, Australian Catholic University). Retrieved from http://dlibrary.acu.edu.au/digitaltheses/public/adt-acuvp129.17052007/.
- Miles, M.B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE
- Ministerial Council for Education, Early Childhood Development and Youth Affairs. (Australia) (2008). *Melbourne declaration on educational goals for young Australians*. Melbourne: MCEETYA
- Mulcahy, D. (2011). Assembling the 'accomplished' teacher: The performativity and politics of professional teaching standards. *Educational Philosophy and Theory, 43*, 94-113. doi: 10.1111/j.1469-5812.2009.00617.x
- New South Wales Institute of Teaching. (2012). *National Professional Standards for Teachers* [PDF version]. Retrieved from http://www.nswteachers.nsw.edu.au/DownloadDocument.ashx?DocumentID=737.
- Newlyn, D.J. (2006). The 'legalisation' of education: A study of New South Wales Teachers and their professional development needs in the area of law (Doctoral dissertation, University of Wollongong). Retrieved from http://ro.uow.edu.au/theses/697/.
- Pusey, P. & Sadera, W.A. (2011) Cyberethics, cybersafety, and cybersecurity: Preservice teacher knowledge, preparedness, and the need for teacher education to make a difference' (2011) *Journal of Digital Learning in Teacher Education* 28(2), 82-88.
- Pruitt-Mentle, D. & Educational Technology, Policy Research, and Outreach. (2008). 2008 National Cybersafety, Cybersecurity, Cyberethics Baseline Study [PDF version]. Retrieved from http://www.staysafeonline.org/sites/default/files/resource_documents/NationalC3BaselineSurvey_11_14_08_Final_w_f orward%2B%283%29.pdf.
- Pruitt-Mentle, D., Pusey, P. & Educational Technology, Policy Research, and Outreach. (2010). *State of K12 Cyberethics, Saftey and Security Curriculum*. [PDF version]. Retrieved from http://www.edtechpolicy.org/cyberk12/Documents/C3Awareness/2010Survey.pdf.
- Jamieson-Proctor, R., Albion, P., Finger, G., Cavanagh, R., Fitzgerald, R., Bond, T., & Grimbeek, P. (2013). Development of the TTF TPACK survey instrument. *Australian Educational Computing* 27(3), 26-35.
- Schimmel, D. & Militello. M. (2007). Legal literacy for teachers: A neglected responsibility. *Harvard Educational Review* 77(3), 257-284
- Stevenson, A. (2012, May 9). Younger, cheaper teachers to fill state's schools. *Sydney Morning Herald* Retrieved from http://www.smh.com.au/national/education/younger-cheaper-teachers-to-fill-states-schools-20120508-1yb3n.html
- Stewart, D.J. (1996). School principals and the law: A study of the legal knowledge needed and held by principals in government schools in Queensland (Unpublished doctoral dissertation). Queensland University of Technology, Brisbane, Qld.
- Stewart, D.J., & McCann, P. (1999). Educators and the law: Implications for the professional development of school administrators and teachers. *Journal of In-Service Education* 25(1), 135-150.
- Tapp, J.L & Levine, 'F.J. (1974-1975) Legal socilization: Strategies for an ethical legality. *Stanford Law Review* (27)1, 1-72 Trimble, A.J., Cranston, N. & Allen, J.M. (2012) School principals and education law: what do they know, what do they need to know. (2012) *Leading & Managing* 18(2), 46-61.
- York, L. (2013). Legal literacy and ICT: An examination of the Australian Teaching Standards and implications for teachers' understandings of law. In *Proceedings of the Australia & New Zealand Education Law Association 22nd Annual Conference: Safe, Successful and Sustainable Education Is the Law a Sword or a Shield?* [PDF version] (pp. 69-78). Brisbane, Old: ANZELA.

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