Introduction

Journalists have used technology to achieve speed and increased efficiencies in the production of news since the 1850s (Quinn, 2016). However, since the arrival of the Internet, online and mobile technologies have created “radical shifts” (Franklin, 2012, p. 663) in the speed and means by which journalists gather, report, and deliver news. News organisations have developed innovative ways to distribute their news stories on web-enabled devices and via mobile and social media (MSM) tools in order to secure audience attention and, therefore, maintain revenue (Grueskin, Seave, & Graves, 2011). The latest industry reports continue to paint a common picture of job losses, cost cutting and falling print revenues, against further adoption by advertisers of online platforms and news devices that are largely supplementary to broadcast but frequently at the expense of print (Newman, Fletcher, Levy, & Kleis Nielsen, 2016).

The purpose of this project was to rise to the call for a timely review of journalism education. Our focus was to find a way lecturers could apply a net-centric model that facilitated a closer connection between the theory and practice of MSM within a journalism context which would enhance the experience for students. Experimenting with new ways to teach journalism could reinvigorate journalism programmes as well as encourage stronger connections between educators, scholars, and practitioners (Mensing, 2010). “Teaching students attitudes and skills that fit a journalism of the past is a disservice to the industry, to students and to the credibility of the university” (Mensing, 2010, p.17).

Literature Review

According to Deuze (2006), the education and training of journalists is a subject much debated but rarely researched although he acknowledges that there are many academic bookshelves and peer-reviewed journal articles on the subject. However, the problem lies in the literature itself, which tends to be either too normative or too descriptive, featuring case studies of what does or doesn’t work in a classroom, or generalised and drawing on the accounts of senior scholars’ lifelong experiences in “doing” education (Deuze, 2006). Legacy media - newspapers, radio and television - have adapted to technology. Wenger and Owens (2013) found that in 2010, American employers were increasingly beginning to look
for multimedia skills for broadcast and print journalism positions, and skills in social media and mobile content delivery. However, journalism schools may have been slower to react to these shifts (Gillmour, 2016).

Too few are helping students understand that they may well have to invent their own jobs, much less helping them do so. Yet journalism education could and should have a long and even prosperous future—if educators make some fundamental shifts, recognizing the realities of the twenty-first century (Gillmour, 2016, p. 815).

Traditionally, journalism schools have worked within an industry-centered model with a core focus on turning out professionally oriented students ready for jobs in the media industries (Dickson, 2000). However, it is argued that it is not what journalism we are teaching, but how we are teaching it. According to Blaschke (2012), the educational focus needs to be on producing learners who are highly autonomous and therefore well-prepared for the complexities of today’s newsrooms. Blaschke states that pedagogical (teacher-determined) and even andragogical (self-directed) teaching approaches are increasingly becoming outmoded. Educators are now turning their interests towards a net-centric theory that provides an effective framework for journalism education in the digital age (Blaschke, 2012). This theory is called heutagogy, a (student-determined) approach which was developed by Hase and Kenyon (2007) while examining learning experiences and curricula designed in the Internet era. They considered andragogy had the advantages of self-directed learning – such as the ability to link into the adult experience – but it was too teacher-centric (Hase & Kenyon, 2007). Therefore, the notion of heutagogy was developed as “learner-centered learning that sees the learner as the major agent in their own learning, which occurs as a result of personal experiences” (Hase & Kenyon, 2007, p. 112). The term was adapted from the ancient Greek for “self,” and key attributes are displayed in Table 1.
Table 1. The key attributes of Heutagogy and primary sources of initiation

<table>
<thead>
<tr>
<th>Initiator</th>
<th>Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturer</td>
<td>Recognition of the emergent nature of learning and hence the need for a ‘living’ curriculum that is flexible and open to change as the learner learns</td>
</tr>
<tr>
<td>Student</td>
<td>The involvement of the learner in this ‘living’ curriculum as the key driver</td>
</tr>
<tr>
<td>Lecturer</td>
<td>Recognizing that knowledge, skill acquisition, and learning are separate processes and need different approaches</td>
</tr>
<tr>
<td>Student</td>
<td>Identification of learning activities/processes by the learner, not just the teacher</td>
</tr>
<tr>
<td>Lecturer</td>
<td>Using action research and action learning as meta-methodologies in the learning experience</td>
</tr>
<tr>
<td>Student</td>
<td>Involvement in the design of assessment, self-diagnosis, and application of knowledge in real-life contexts</td>
</tr>
<tr>
<td>Student</td>
<td>Collaborative learning</td>
</tr>
<tr>
<td>Lecturer</td>
<td>Coaching for individual learning needs and application.</td>
</tr>
</tbody>
</table>

(adapted from Hase & Kenyon, 2007, pp. 114-115)

*Removing the disconnect between theory and practice*

By adopting a heutagogical teaching approach, students are able to take a proactive role in the acquisition of the skills necessary in order to use online and MSM tools in the production of news stories, and this removes the disconnect between the theory and practice (Cochrane, Sissons, Mulrennan, & Pamatatau, 2012). This hypothesis was tested by the Journalism teaching team at AUT University, initiated by a senior journalism lecturer and a senior member of the university’s learning and teaching centre who was referred to as a technical steward. Participatory Action Research (PAR) theory was applied, whereby participants see themselves, their understandings, their practices, and their settings from the perspective of insiders, while on the other hand, seeing the same elements from an outside perspective in order to create critical distance (Kemmis & McTaggart, 2000). Underlying tenets of PAR include: (a) a collective commitment to investigate an issue; (b) self- and collective reflection to gain clarity about the issue under investigation; (c) engagement in action that leads to a useful and beneficial solution; and (d) alliance building between researchers and participants throughout the research process (Griffiths, 2002).
The technical steward had previously applied a heutagogical framework across 40 mobile-learning projects (Cochrane, 2012; Cochrane & Bateman, 2013; Cochrane, Black, Lee, Narayan, & Verswijvelen, 2012). He guided the establishment of a Community of Practice (CoP; Lave & Wenger, 1991) which included five practice-based journalism lecturers familiar with MSM tools applied within news work, who were interested in exploring net-centric pedagogies within their teaching. The CoP also included a representative from the journalism industry, a former journalist who had pioneered broadcast extensions on the web and across mobile platforms, and developed social media strategies for news organizations including ITV (UK) and TVNZ (New Zealand).

The project was conducted for three years, from 2013-2015. Informed consent was obtained from all the students and lecturers participating in the project. Data were collected from lecturers’ observations in the classroom and anonymised content from 65 students’ work throughout the period. A requirement of ethics approval was that the researchers would only make use of data from the students’ work after they had completed the course, as much of it related directly to assessment work. The project received funding grants: in 2012, LATENT Grant for Mobile Social Media tools; in 2013, LTDF Grant for Mobile Social Media in Journalism Education; and in 2014, LTDF Grant for Mobile Social Media and the Law. The CoP members received a number of university faculty awards, including: Dean’s Service Award, Research Outcomes, Highly Commended; and Faculty Learning and Teaching Award.

A CoP to support the exploration of MSM tools

A CoP is defined as the coming together of a group of people who “engage in a process of collective learning in a shared domain of human endeavor” (Wenger & Trayner-Wenger, 2015, p.1.). The CoP members identified themselves with the nomenclature Enhancing Journalism Education, met weekly and co-created and posted ideas which archived their progress onto a blog (EJEteam.wordpress.com). They also used the CoP meetings as a place where they could discuss their experiences, and share new knowledge about emerging tools which went beyond those being prioritised by industry in the capture, curation, and publication of news. The author conducted a national symposium to test the CoP’s ideas among journalism educators and industry attendants (Mulrennan, 2013). The feedback from
the symposium was that the attendants were interested in the project; however, among the educators there was a sense of being overwhelmed by the need to teach within an area (MSM) which was so rapidly evolving.

**The exploration of a net-centric pedagogy**

The CoP members identified a course paper that was due for review and redevelopment, which was selected to test a pedagogical shift from teacher-directed to student-determined net-centric heutagogy (Cochrane et al., 2013). Key indicators of success were that students would establish and actively participate within their own student CoP in the classroom; context-shaping, whereby students create project teams that investigate and critique user-generated content within the context of journalism; and broadening their focus, which would take them outside the classroom to actively participate within a global CoP (Cochrane et al., 2013).

The paper which was selected for redevelopment was called New Media Journalism. The original paper descriptor read:

> This paper examines the digital technologies and the issues affecting journalists and online news media sites. Covers the writing, editing and site design skills relevant to online journalism, including digital photography and image editing. Involves newsgathering with the aim of publication on the course website (course descriptor, 2009).

This descriptor was redeveloped within a heutagogical framework as Mobile Journalism (Mojo), modelled on a term loosely applied to describe contemporary journalistic practice based on web-enabled multimedia newsgathering equipment (Cameron, 2009). As part of the redevelopment, the authors decided to take the course into the classroom where students were able to explore a range of MSM tools relevant to journalism practice, supported by lecturers
and technical staff. These elements would not have been possible when students worked online alone and typically in a home environment. The redeveloped paper descriptor read:

Examines and critiques the mobile digital technologies, production and curation of news and social media source material within online news media sites. Covers mobile recording of news via mobile applications in text, image, audio and video, including crowd-sourcing, live streaming and social media enabled collaboration for publication on the course website. Establishes e-portfolios, which become the basis for a professional entry into contemporary journalism (course descriptor, 2013).

Accordingly, the assessments were also redeveloped to move from a pedagogical towards the heutagogical nature of the Mojo course as shown in Table 2.
Table 2: Redeveloped assessments that demonstrate a shift from pedagogy to a heutagogical framework*

<table>
<thead>
<tr>
<th>Assessment events 2009</th>
<th>Cognition level</th>
<th>Relevance to MSM</th>
<th>Shift</th>
<th>PAH(^1)</th>
<th>alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1:</td>
<td>Cognitive</td>
<td>N/A disconnect</td>
<td>Teacher directed</td>
<td>Pedagogy</td>
<td></td>
</tr>
<tr>
<td>Group presentation in class and individual essay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment 2:</td>
<td>Cognitive</td>
<td>N/A disconnect</td>
<td>Teacher directed</td>
<td>Pedagogy</td>
<td></td>
</tr>
<tr>
<td>Use LMS discussion forum for web portfolio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment 3:</td>
<td>Cognitive</td>
<td>Web 1.0</td>
<td>Toward student centred</td>
<td>Andragogy</td>
<td></td>
</tr>
<tr>
<td>Learn Dreamweaver for personal web design</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment events 2013</th>
<th>Cognition level</th>
<th>Relevance to MSM</th>
<th>Shift</th>
<th>PAH(^1)</th>
<th>alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1:</td>
<td>Cognitive</td>
<td>Personal digital identity building</td>
<td>Teacher modeled</td>
<td>Pedagogy</td>
<td></td>
</tr>
<tr>
<td>Establish mobile social media portfolio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment 2:</td>
<td>Meta cognitive</td>
<td>Collaborate in learning community as content creators</td>
<td>Teacher guided</td>
<td>Andragogy</td>
<td></td>
</tr>
<tr>
<td>Students collaboratively curate, critique, and publish a current example of mobile social media news</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment 3:</td>
<td>Epistemic</td>
<td>Enabling active participation within a professional community</td>
<td>Student directed</td>
<td>Heutagogy</td>
<td></td>
</tr>
<tr>
<td>Students create an international journalism team facilitated by mobile social media and negotiate a news story</td>
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</tr>
</tbody>
</table>

\(^1\)PAH (pedagogy-andragogy-heutagogy) alignment refers to the reconception from a teacher-directed towards a student-determined approach.

*This table is derived from data presented in Cochrane et al., 2013.

Implementing student-generated MSM content within a news context
By the end of 2015, Mojo had been delivered for three years. Each year, two tutorial groups featuring a lecturer in each classroom led 16 students in each cohort. All students were required to own or to have access to a web-enabled smart phone or tablet, and a funding grant was used to provide each of the two lecturers with an iPhone and an iPad. This enabled them to model the use of up to 36 MSM tools, which were introduced across 12 weeks of tutorials. These tools, were identified as commonly used by professional journalists within their daily praxis. The selection was also discussed with journalism educators and industry participants at the national symposium mentioned earlier (Mulrennan, 2013). They included Twitter, Instagram, Facebook, YouTube, Google Docs, Evernote, Soundcloud, Vine, Vyclone (which is no longer in existence), Bambuser, Vimeo, Skype, Google-Plus Hangouts, videoconferencing tools, Storify, Flipboard, Prezi, Linked-In, Wordpress, Trello (a project management tool), and Todaysmeet (an educational live-blogging tool), to name a few. A key element of the heutagogical learning approach was that the students, themselves, would explore the use of these tools or identify alternative tools they preferred which had a similar function. For example, some students favored Blogspot as an alternative to Wordpress. We were happy to accommodate these variations within the tutorial-based activities, and for course assessments as long as they met the requirements of the assessment. In this way, students were able to engage their own preferences and, in some cases, integrate tools they were using outside the classroom. This also reinforced the view that there was no delineation between personal and professional self, as all online activities should be treated as potentially ending up in the public domain.

Developing reflective teaching practices

Throughout the three-year study, members of the CoP group reflected on how the heutagogical teaching framework was being received by the students. Here are the key researchers’ reflections, which were captured on the CoP blog Enhancing Journalism Education located at the address ejeteam.wordpress.com:

Students began with some knowledge of mobile social media, and gained an understanding of the academic and critical framework behind it, which informed their
practical exercises and assessments. The students responded well to the heutagogical (student-determined) teaching approach, and some outstanding course work was achieved. The lecturers found critical success factors (Cochrane, 2012) of modelling use of the tools, creating supportive communities of practice within the tutorial groups, and creating sustained interaction that facilitated the development of ontological shifts (particularly during online digital identity assessment) most effective (Cochrane, 2013).

Experience teaching Mojo over the past two years has shown that technology and apps are developing at a rate, that a slower-moving beast like the curriculum cannot keep up with. Therefore, it is proposed that the most effective way to integrate MSM into the journalism curriculum is by drawing on the functions which reflect best practice and, to follow a heutagogical approach whereby students choose the tools which enable them to perform the required function (Mulrennan, 2015).

What has become very clear during the curriculum design period is that professional development for all teaching staff is important. Most of us had left the news industry some years ago before the introduction of many of the new tools (Sissons, 2016).

Students created their own wordpress blogs and posted reflective statements as part of their assessments. They commented on the skills they were acquiring throughout the course in relation to beginning a career in the journalism industry. Here are some examples:

In this world where physical boundaries are becoming less and less and time with people is getting harder to organise, this (videoconferencing) software enables journalists or PR professionals to connect with those that they need to, instantly, face-to-face, anywhere in the world. I can see this software becoming part of my everyday life in future as I move forward as a professional (student, 2013).

Pinterest, Vyclone, Vidyocast, Twitter and Facebook are all tools that allowed me to share, connect, keep up-to-date and converse with other social media users on a local and global scale. These tools are not only vital for creating my social identity, but are an ongoing source of information for the journalism industry which I am now a part of (student, 2013).
What was evident during class is while there is a class discussion going on, students write questions and “comments” as they pop into their heads. This enables more students to ask more questions and “share” more comments than if they all had to raise their hands and wait to be called upon to speak. Which is always beneficial. If social media is used in teaching the opportunities to express oneself, participate, collaborate, find information, reflect and learn together is expanded (student, 2015).

Creating critical distance from an outside perspective

The aim of this project was for lecturers to use the net-centric heutagogical model to facilitate a closer connection between the theory and practice of MSM within a journalism context. It was guided by PAR theory, however, as not only does PAR require participants (the practice-based researchers) to provide the perspective of insiders, but also an outside perspective is needed to create critical distance (Kemmis & McTaggart, 2000). Therefore, in this project an outside perspective was provided by the students – as non-practitioners and therefore “outsiders” – through reflective blog posts the students posted on their individual blogs. The next section looks at the development of the students’ views of MSM over the three years of the course.

The students’ reflective blogs demonstrated an increase in depth of understanding of MSM from 2013-2015. These observations, which relate to Facebook and Twitter, were of particular interest when applied within a news context under the theme of “authenticity”:

Facebook - students in 2013 considered Facebook was lacking authenticity, especially when the page was run by an organisation rather than an individual, as it tended to be regarded as a public relations output. In 2014, students started to notice how individuals were using Facebook, particularly by the ability to interact through commenting and sharing thereby gaining insight beyond the public face of an individual. In 2015, students identified that privacy was an issue directly related to the increased use of Facebook. They considered
there was a blurring between exploitation of a citizens’ private information on public display through social media and a person’s right to be left alone.

Twitter - in 2013 students considered Twitter authentic and straight to the point, using “active voice” in short messages students felt were unlikely to have been mediated by a third party. In 2014, Twitter was becoming recognised by students as a valuable newsgathering tool, particularly as it was increasingly being quoted in stories students were seeing in the media. The students liked the fact that they were able to “comment” and feel a part of the news agenda, particularly when their favourite celebrities were involved. In 2015, students identified that 140 characters doesn’t allow for context and therefore has potential to drive unrest among followers – even though pictures and videos could be posted as part of the “tweet.”

Also in 2015, there was an indication that the students had a more sophisticated, nuanced view of the MSM tools than in the previous two years:

1. One issue students identified was the demand for information by consumers, and their belief that ‘getting it right’ should be more important than ‘getting it first’.
2. Verification was considered an issue of particular important due to the ‘lawlessness’ of citizen journalists associated with the rise of blogs, crowdsourcing, and user-generated content.
3. Speed of delivery was also identified as contributing to the lack of thorough verification practices among journalists under pressure.

Discussion and limitations

The hypothesis, has been tested that a reconnection between theory and practice can occur when a heutagological teaching approach is used to enable students to take a proactive role in acquiring skills necessary in the use of online and MSM news production (Cochrane et.al., 2012). By applying a PAR model, a CoP of research “insiders” have reflected on their practice-based understandings and created critical distance by reflecting on the same elements from students’ perspectives as “outsiders” (Kemmis & McTaggart, 2000).

By moving away from the traditional teaching framework of teacher-directed pedagogy or even student-directed andragogy, a net-centric and student-determined teaching framework of heutagogy was applied in the redevelopment of a university course which focused on MSM and journalism practice. This framework was put into practice by
university lecturers. The outcome was that students were able to critique and apply the relevant use of MSM applications in different ways, and because the topics had news relevance, they were framed within the contemporary practices of journalism. The purpose of this, was to set the students up for life-long learning in the aggressive and rapidly evolving news industry.

In 2013, at the beginning of the study, the students were just starting on their journey to learn more and engage with MSM. Approximately one-third of the students demonstrated a lack of confidence in the use of a number of tools that required them to publicly display content they had created, in particular written texts. Through the integration of the live-blogging educational tool Todaysmeet into classroom tutorials, students who were reluctant to join in oral discussions in the classroom, grew in confidence as they became familiar with seeing their words on a large screen in the classroom. By 2015, the students showed a greater willingness to go beyond the geographic comfort zone of the university and city, and into the global arena with one group conducting a Skype interview with a senior academic and blogger from an American university who, in turn, blogged about the experience afterwards (Buttry, 2015).

Between 2013-2015 a growing depth of understanding occurred by the student groups of MSM tools. This advanced from a cursory awareness of what these tools could do (2013), to an increased awareness of limitations (2014), and then the ability to consider the effect and implications of MSM use (2015). This was clearly outlined in the students’ reflective blog posts when considering the use of MSM tools within a news context.

A limitation of the project was that, although the course was an initiative from the journalism curricular area, the Mojo course was an elective (optional) for all students enrolled in a communications studies degree. So, apart from the journalism majors, the lecturers also had to accommodate students majoring in public relations, television, and radio. Therefore, while journalistic practice and news was a strong focus, these other communications areas also had to be a consideration. However, the heutagorical framework provided the flexibility for the students to apply the coursework within their own major, as MSM was a characteristic across all curricular areas within communications.

Conclusion
There are significant shifts in knowledge around MSM, and students are developing in their confidence to explore more technologies and apply them in a range of situations when they are undertaking tertiary-level practice-based study. A net-centric heutagogical, or student-determined, teaching approach (Hase & Kenyon, 2007) enables students to acquire the skills they need to produce journalistic content using MSM for practical application when they transition into industry practice. Technology and MSM tools are developing at a rate that curriculum development cannot keep up with. Therefore, heutagogy encourages students to use existing and newly innovated MSM tools they are using within their own ecologies to perform the craft of journalism. Critical success factors include lecturers modelling the use of smart phones and web-enabled devices in applying MSM strategies, creating a supportive CoP within the lecturing team, which encourages confidence in using MSM correctly, reflective practice, and a commitment to professional development. These findings form the basis of recommendations on the adoption of a heutagogical framework across the wider journalism curriculum, where MSM are an essential requirement of the contemporary journalism practitioner. There are also implications beyond the journalism education landscape, such as other areas of communication studies, public relations, and online or broadcast media.

References


